/320 cont./

C 175 342 interesting: "they make a very big dormitory
and, within it, as many small rooms as there
are residents, and so small that they do not
have room for more persons, and it is enough
for them, because they do not have furniture,
nor do they have wearing apparel and hence
C [114] [113] they go about naked." /Translated from the
Spanish./ These facts agree on every point
with those of the Relaciones geográficas, etc.
(Vol. II, Plate CIV) and of Lizárraga (Vol. I,
C p. 259) on the same subject. The Guarani, just
● [171] like the Tupinamba and other Tupi tribes,
lived in maloca, gigantic halls capable of
C containing more than 150 persons and which
[174] [167] often in themselves formed the village. The
existence of this type of dwelling among the
Chiriguano in the 16th and 17th centuries constitutes new proof for the recent character of
their migration. In the 18th century we find
them already in possession of the small rectangular
house which they still have now and where one
single family lives. (See Métraux, 2, p. 51.)

C 114 127 175 novelist Garcilaso which might allow one to suppose that he
really knew who the Chiriguano were. As for this conquest by
the Inca, it would have been barely an attempt at conquest...
C 114 127 175 648 [101] Garcilaso confuses the Chiriguano with all the tribes of the
eastern slopes of the Andes whom he had vaguely heard mentioned. Let us note that he is the only one to attribute this
expedition to the Inca Yupanki, while the other chroniclers,
better informed, are satisfied to say that the Inca Yupanki made
an expedition against the Antis, probably around Cuzco. Unfortunately the vogue this pleasant writer enjoyed at a time
when the history of America was still in limbo bluffs some
modern critics into believing him, and they go so far as to
prefer one of his unwarranted affirmations to the serious /321/
and precise evidence of chroniclers who get their information at
first hand and from reliable sources.

/329 cont./

Ce clearly Arawak by its technique and many a detail of its
172 structure. It dates from an epoch when the Chané, newly
167 come to the foot of the Andes, had not yet undergone the
[177] Andean influence of the populations of the Bolivian south
(Chicha, Atacama, etc.).

C When they arrived among the Chané, the Guarani had
G a civilization nearly identical with that of their racial
181 brothers, the Tupinamba of the Brazilian coast, whose ethnography
● 171 is so familiar to us, thanks to the old French and
Portuguese chronicles. They differed little from their present-day cousins, the Kainguá /Caingua/ of Brazil and Paraguay, who are independent but impoverished Guarani.

C Upon contact with the superior Chané civilization, the
G Guarani adopted it as it was, introducing, however, some
177 cultural elements of Paraguayan origin. From this fusion of
181 the two nations was /330/ formed a center of acculturation
which we can designate as Chané-Chiriguano civilization.

C It is through the medium of the Chané that so many aspects
177 of Andean civilization still characterize Chiriguano culture. For how could we otherwise explain so strong an effect of Andean civilization on the Chiriguano at the time when that civilization was failing and disappearing, at least partially?

Ce The Chané, on the other hand, established for centuries
177 near the Chicha and other Indians of the south of mountainous
178 Bolivia, have, thanks to their trade relations, submitted to
the attractions of the Andean civilization which has infiltrated among them, as among the other tribes of the Chaco, in the form of toilet objects, jewels, artistic motifs, games, words, and vices. It is these multiple contributions which give the Chané culture this Andean appearance which strikes every ethnographer used to the peoples of Brazil. But, having come from the great forests of the Amazon basin, these "Quichuaized /Quechuaized/" Arawak have faithfully kept until today furniture and utensils which betray this origin and tie them directly to their faraway relatives of the Guianas. The Chané civilization was and still is a mixed civilization formed of elements from different sources and often of opposing nature.

/334 cont./

241 423 243 [685] Before taking possession of a new plot of land the Chiriguano is always careful to make sure that there is no trace of previous cultivation. Otherwise the former owner or his descendants would have the right to lodge a complaint against him to the chief of the village.

[824] The Chiriguano makes known his new property right by planting any edible plant before the rainy season, for example, the large squash (gindako-wasu) which spreads everywhere and is not smothered by the underbrush. He can equally well insure possession of the chosen terrain by knocking down the underbrush all around and making big gashes in the trees (1).

● [171] 1. Compare this manner of insuring property rights with the method observed by the Caxinawa /Cashinawa/ in the same circumstances: "I saw (an Indian is speaking) rising ground which is suitable for a planting. I am going to make a planting for this summer. I broke many branches on this hill to mark this excellent place. No one can make his clearing on this hill. This hill is excellent; do not go there to make your planting." (Abreu, p. 69.)

241 243 In the middle of the dry season, say, in August, the Indian, with a long stick sharp on both sides, fells the underbrush which encumbers his future field and sets fire to it. This operation has the further advantage of fertilizing the soil, thanks to the bed of ashes, which is a rather good fertilizer.

[231] The cultivated fields are usually cleaned up after the harvest. The domestic animals, who feed there with little expense, are first let out there, and then the fields are set afire.

[221] [821] Sowing takes place in the month of November when the first rainstorms have softened the soil. This time is announced by the appearance of the Pleiades (itšu) above the horizon early in the morning.

/336 cont./

241 have described here. These finds were made in the ruins of
412 the Alfarcito and of the Pukará de Tilcara (Debenedetti, 4,
172 Fig. 17 and p. 32) and at the Huerta in the same Quebrada de
243 Humahuaca. Numerous wooden shovels have been dug up at La Paya (Ambrosetti, 6, Figs. 236-237, pp. 457-458), and Ambrosetti supposes with justification that they were hafted like those of the modern Chiriguano. Debenedetti (1, p. 35) obtained a specimen of this instrument at Kipón in Salta province.

● [171] This type of shovel is particularly well represented in the archeological material of the Chilean coast. Numerous specimens have been found in Calama, Chiuchiu, and Pica in Tarapaca province (Boman, 2, Vol. II, pp. 731-732 and Plate LXVIII a; and Uhle, 3, pp. 15-16 and Plate I).

[171] The half-breeds and Indians of the Bolivian altiplano still work the earth today with a spade which in no way differs from that of their ancestors; moreover, it shows great similarity
/337/ to the wooden shovel of the ancient Chiriguano (Chervin, p. 216, Fig. 120).

241 Nordenskiöld (9, pp. 30-32), studying the distribution
412 of this cultural element, established that it was peculiar to
171 the Andean zone and the adjoining regions. The Chiriguano
243 shovel nonetheless has a characteristic feature for which we should look in vain on all the specimens found inside the boundaries of the Inca Empire: this is the crescent-shaped handgrip. It corresponds quite precisely to the crutches terminating the oars in use among the tribes of Brazil, Paraguay, and the Guianas and on which the paddler puts his hand flat.

241 The Chiriguano formerly lived in a region rich in rivers and
412 streams, and they probably made use of paddles of this type to
174 go up or down them. Once settled at the foot of the Andes,
243 the resemblance between their former /Fig. 5 appears here/ oars and the shovels they saw in the hands of the Chané or the Chicha must have struck them; and they naturally sought to adapt to the new instruments this detail of structure whose convenience paddling had shown them. Such a hypothesis is not too adventuresome, for do we not have in the Chaco some shovels which have exactly the appearance of oars? (On this subject see the Ashluslay shovel published by Nordenskiöld, 9, p. 30, Fig. 1.)

/344 cont./

526 immediately, chased by his comrades who pulled his hair
178 energetically. The awkward player who threw the ball in such
243 a way that his partner could not catch it was in the same
789 category as the one who let it fall, on condition, however, that his opposite number had not made the gesture of catching it. Once the corn was ripe, they stopped playing mbotó.

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The game of mbotó has a wide distribution in South America, but it is limited to the populations of the Amazonian basin and the Guianas. Doubtless the Chiriguano introduced it into the Chaco (Nordenskiöld, 9, p. 168).

[179] →

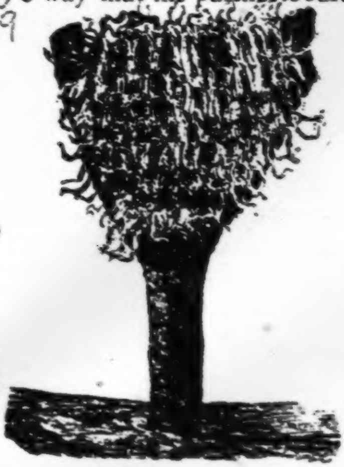

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Fig. 10. Forked tree on which the Chiriguano pile corn inside their huts. This device may have given rise to the corncribs on piles.

526 This game without any doubt derives
789 from a magical rite whose object was to pro-
243 mote the beneficial course of the sun and to oblige it to shine without interruption to make the corn ripen. The straw shuttlecock represents the sun. The period when this game is played and the meaning the Chiriguano attach to it make my hypothesis a very likely one. Preuss demonstrated that in all of Central America and even in North America the /345/ tennis game arose out of a magical operation intended to influence the sun.

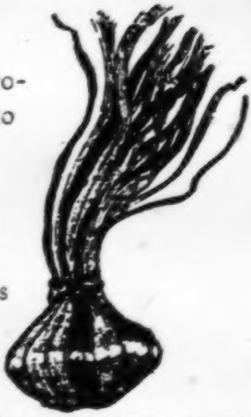

Fig. 11. Straw shuttlecock (mbotó), accessory for the game of the same name. Prov.: Carurutí. (1/3 nat. size.)

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372 [171] In former times the Chiriguano made fire exactly like all the Indians of South America, by rubbing two sticks one against /354/ each other. One of my friends from Carurutí reconstructed one of these devices for me in the hope of surprising me and getting a good price for it. He took two sticks of *tata iwira*, or fire wood (1), cut one of them lengthwise and provided one of its sides with two cups along which he contrived a perpendicular groove. These two little furrows were intended to conduct the glowing sawdust onto the tinder placed on the ground. /Fig. 25 appears here./ The other stick was slightly sharpened to allow it to go into the cups. Since this

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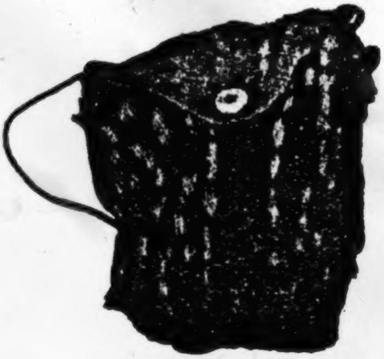

Fig. 23. Small deerskin bag in which a Chiriguano used to carry a tinderbox and its accessories. Prov.: Pípi. (1/3 nat. size.)

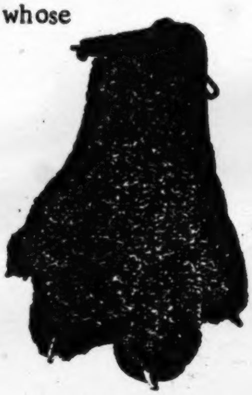

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Fig. 24. Puma paw (*yagua-pintaipo*) made into a bag. Prov.: Saladito. (1/4 nat. size.)

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[824] 1. According to Father D. Giannechini (*Diccionario Chiriguano-Español*, etc., p. 91), the Chiriguano might use, for obtaining fire by rotation, sticks made from the wood of a red liana whose flower has five yellow petals with a red spot on one of them. The Chiriguano name for this plant is *isipo-pinta*. 372 [824]

262 [562] /355 cont./ Women could eat, without harm, parrot, a heavy and stupid bird. In their misogyny the Chiriguano doubtless figured that that would not change their nature in any way. (Campana, p. 92.)

252 Cooking is not a secondary activity; it is an important form /Fig. 26 appears here/ of the material culture and an excellent index for judging the cultural level of a human group. The art of preparing dishes reveals as well as any tool the faculties of invention and taste. In South America one can very well classify the tribes according to the more or less great variety of their dishes and the care they take in preparing them. This hierarchy would certainly correspond to that of the cultural elements.

● [171] In the Chaco, Chiriguano cooking stands in contrast by its variety, its /356/ taste, and its cleanness to that of the more primitive tribes like the Toba or the Matako.

Before passing on to the study of the utensils used by the Chiriguano housewives, it is fitting to describe their menus.

When the Chiriguano kill a cow, goat, or sheep, the meat is boiled in water, roasted on a spit, or dried in the sun (charqui). They are especially partial to the head of the animal they kill, and they eat it boiled after skinning it. The pieces of meat are cleaned carefully before being cooked; and the tripe, for example, which is a delicacy, is taken out beforehand.

Corn is prepared in various ways. If the ears are tender and green, they are boiled in water or grilled over the fire or under the ashes.

When the corn is still in this state, the women prepare simbikuai or humitas (in Spanish). They bite with an appetite into the still tender ears, chew the kernels for a long time, and spit them into a calabash. This white mash saturated with saliva is wrapped in corn leaves and put under the ashes.

[415] The Chiriguano give the name of atipíi to kernels of corn roasted in a special bowl called tapuipe (Plate XIII, 3) or in large potsherds, which tend more and more to replace the primitive utensil appropriate for this use. The atipíi requires

/356 cont./

252 no preparation other than constant stirring in order not to be burned. This food takes the place of bread for the Chiriguano, who like to munch these crunchy and appetizing kernels. They provide themselves with it when they go on a trip.

Atipíi pounded in a mortar and passed through a sieve gives atši, a brownish flour which has an excellent taste. Atši is also prepared differently: kernels of corn are reduced to a flour which is roasted in a terra-cotta roaster or in a wide potsherd. According to Nino (p. 246), the name atikúi would be given to the kernels of roasted corn made into flour after being put through a sieve and ground until pulverized. The same missionary reserves the term atši for roasted flour obtained from the residue left by kernels which have been treated in the following way: after letting them soak in water all night, they are poured into a sieve the next morning. When the water has drained off, they are pounded in a mortar. This flour is now sifted, then roasted; cooked in water, it is the dish the Chiriguano call muintí or huinti. Atši then would be made with the residue from the muinti flour, which is ground again, then roasted like it, but first mixed with salt or pimento. I [122] have often eaten roasted corn flour which the Indians told me was atši, but I could never tell that it was seasoned. The Chiriguano give the name abatikure to the corn bran.

This is how muintimimo is prepared: kernels of corn are /Plate XIII appears here/ /357/ put to soak all night. The next morning they are ground and sifted in an urumpé (sieve with very fine mesh). The flour is poured into a muitero [415] (Plate XIII, 1 and 2). This utensil is a terra-cotta basin whose bottom is pierced with holes like a skimmer (1). The flour is

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● [171] [114] 1. Linné (2, Map 1, p. 23) has given us the distribution of vessels with perforated bottoms throughout America. The enumeration he makes of them is very complete; yet it lacks mention of La Rioja in the Argentine Republic where Boman (5, p. 17) discovered fragments of vessels whose bases were entirely perforated like a sieve.

[Text continues on p. 104]

T /360 cont./
175 their four fingers from the earthen dish or other vessel in
264 which they keep it, even though they throw it from rather far
away, nevertheless they put it so accurately into their mouths
that they do not drop a single bit. So that some of us French-
men, wishing to imitate them, thought we would eat it in that
fashion, and not being at all trained for that like them, in-
stead of throwing it in our mouths, we discharged it on our
cheeks and floured our whole face; /361/ consequently unless
those principally who wore beards would have wanted to be
accoutered as players of farces, we were constrained to take it
T with spoons" (Léry, Vol. I, pp. 143-144).

262 This comparison permitted me to suppose that roasted
252 corn flour has simply replaced the "farinha" of the Brazilians.
264 As we know, the pulp of manioc tubers, after being carefully
squeezed in the *tipiti*, or trough, was roasted on a terra-cotta
slab and changed into dry flour, with which the Tupinamba
C accompanied all their meals. The Chiriguano think the same
262 way about *atši*: they say that corn flour, in order to be eaten,
264 must have an accompaniment, an *intina*. To my way of think-
176 ing, *atši* and *muínti* are two substitutes for manioc flour that
the Chiriguano invented or adapted after emigrating into a
C land where bitter manioc was unknown. Neither the other tribes
● [171] of the Chaco nor the Quichua eat corn in this form, and, to my
knowledge at least, there is no doubt that the Chiriguano
introduced these two dishes into the country, without counting
a goodly number of the ones which have been enumerated.

C The only fruits that the Chiriguano consume on a large
262 scale are the prickly pear or *tuna* (*Opuntia*), which are seen
C in all their villages. They also plant some fig and orange
[245] trees when they are under mission influence. They are also
[797] great lovers of melons, of *sandias* (watermelons), and when
they have eaten one of these which has pleased them particularly,
they keep the seed. They love sugar cane with a passion.
Sorghum is especially meant for the children, for whom these
graminaceae are a veritable sweetmeat. They suck the juice,
which is as sweet as that of sugar cane.

/362 cont./

262 The Chiriguano call kumanara a leguminous plant, wild,
[252] which resembles the yuca and which can serve as food after
being boiled. They resort to it only when pressed by hunger.
The word designating this plant has a strange resemblance to
[192] the name of the batata in the Quichua dialects of Ecuador
and northern Peru (Rivet, 3, pp. 583-590). It is perhaps a
question of a Quichua word introduced into the Chiriguano
language to designate a plant of which they did not have the
equivalent in their original homeland. The case is nevertheless
rare, and one can wonder if it is not a simple coincidence.

[222] Neither do the Chiriguano look down on honey, although they
[171] do not seek it with the passion of their cousins, the Kainguá.
What I tasted among them was contained in thin honeycombs having
the consistency of cardboard. It had a pleasant taste.

222 Any Indian who goes in search of honey (ei) must not make
784 his intention known to anyone and, if he is asked where he is
going, he must answer: "To look for wood." If you do not take
[776] these precautions, the protecting spirit of the honey is warned of
your plan and hides the honeycombs he guards (Diccionario
Chiriguano-Español, etc., p. 86).

222 The missionary Corrado (p. 43) assures us that grass-
114 hoppers, cicadas, the larvae of bees are that many delicious
[252] dishes for the Chiriguano. He adds that these insects are roasted.
Nino (p. 247) reproduces the statements of his predecessor and
completes the list of strange foods by adding /363/ ants, lizards,
leaves of the cucurbitaceae, melted tallow, etc. Personally I
[171] have never seen the Chiriguano touch these dishes strange to
our palates, but I am all the more inclined to believe these two
missionaries that the tastes they indicate are actually those
of the Indians in other regions.

262 Already in the 16th century the Chiriguano passed as snake
252 lovers, even of poisonous species. They cut off the head and tail,
skinned them, and roasted pieces of them on live coals. They
used to eat them with pimento. No doubt the Spaniards con-
[178] fused snakes with iguanas, which even today the Chiriguano
justly like (Lizárraga, Vol. I, p. 260).

C 273 /368 cont./

A certain variety of kãwi is prepared by boiling it again after passing it through the sieve and "bottling" it only after letting it cool a second time.

Kãwi is generally covered with a thick oily layer which the Indians are far from scorning. The mistress of the house takes the precaution of pouring a certain quantity of it into the vessels which do not have any.

In their descriptions of the preparation of kãwi, Giannecchini and Nordenskiöld say nothing about the temišu, the umopirai, and, in general, a good many of the stages the corn goes through before being converted into beer. This silence is probably due to the very complexity of this operation, more than one detail of which certainly escaped them. The preparation of kãwi is a tiring occupation which requires great effort. The Indians display a veritable science in its manufacture. It is easier to distill alcohol, and, in any case, this is a task demanding less physical activity. Perhaps centuries of groping were needed for arriving at determining the time of cooking, the proportions of roasted and chewed flour, the quality of the grain, etc. All that is the result of minute observations, many trials, and also much reflection. These considerations are intended to justify the remark made at the beginning of this chapter: a simple cooking recipe often tells as much about the civilization of a people as a perfected tool.

C 273 824 ● [171] /369/ The fruits of the mistol, chañar, or algarroba can give a chicha that the Chaco Indians like very much, but which the Chiriguano scorn. They have recourse to it only in case of scarcity. ce [273] [824] [114] The Chané of the Izozoc, whom I could not visit, have the specialty of kãwi from batatas. The Chiriguano also know how to make use of this tuber to prepare a fermented drink, but they judge it to be of inferior quality and declare that one must be a poor devil to take any. (Nordenskiöld, 2, p. 236) (1).

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1. Barco Centenera (p. 315) already mentions the different types of chicha prepared by the Chiriguano: "El vino de maiz y de algarroba,

/371 cont./

415 Certain vessels (Fig. 35) have the exterior surface entirely
531 covered with these depressions obtained by pressure of the thumbnail. The Indians call this decoration tatupire, that is "armadillo carapace," /Fig. 37 appears here/ a completely justifiable comparison.

One can consider as an evolution of the process of ornamentation by finger impressions the angles or chevrons which decorate the outside surface of the vessel of Figure 2, Plate XVI /see p. 125/, which have been incised in the soft clay with a pointed instrument. This type of ornamentation can be reduced to its simplest expression; thus on the neck of the vessel of Plate XVII, 2 /see p. 127/ it is limited to a row of little cavities made with a pointed stick. The small vessel of Figure 36 /see p. 128/ with a belly flattened from top to bottom belongs, from the decorative point of view, in the same category.

415 On another vessel (Plate XVI, 1) the small nipples which
531 project /372/ all around the belly constitute a summary
● 171 decoration which completes that of the neck formed by fingernail impressions. Pots of this type are found among the Ashluslay (Nordenskiöld, 9, Fig. 65, p. 218).

This decoration is exceptional in South America. Jijon y Caamaño (p. 6) considers it characteristic of the northern part of Ecuador. He points out its distribution in Central America and in the Mound region in the United States.

[126] The îru of Plate XVIII, Fig. 2 /see p. 131/ has the exact shape of a calabash; this resemblance was intentional, for the Indian woman who sold it to me presented it at the same time as the calabash which /Fig. 38 appears here/ had doubtless served as a model. Vessels which are almost replicas of this specimen have been found at Jachal and Calingasta in San Juan province in Argentina (Ambrosetti, 1, Plate VII, and Debenedetti, 3, Fig. 41, p. 69).

415 The Chiriguano call the vessels in which the women
[462] draw the water they need for their households by the Quichua
name îru. The îru are characterized not only by their more
415 or less globular shape and the narrowness of the neck on top,
323 but also by the quality of the paste from which they were

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Typologically, we must put the vessels of the primitive tribes of the Chaco in the category of the iru. Like the Chiriguano or their forerunners the Chané, the Matako, Toba, Choroti, and Ashluslay copied Andean models, which they adapted to their needs. It is appropriate to note that the seminomadic tribes of the Chaco must have fashioned their vessels in such a way as to be able to take them along with

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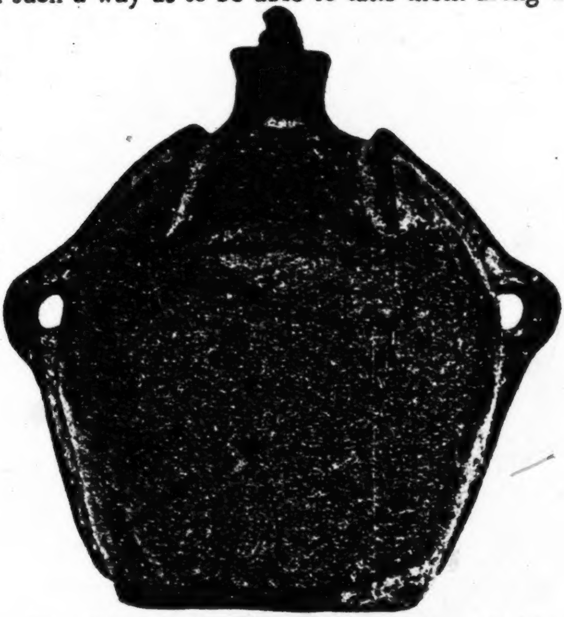

Fig. 39. Toba vessel with bands in relief imitating the suspension cords with which vessels of this type are generally provided. Prov.: Macharetí. (1/4 nat. size ±.)

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them on their peregrinations, while the Chané and Chiriguano, sedentary nations, did not feel the need to modify the primitive form and kept the Andean prototype without bringing variations to it. For comparison I am reproducing here two vessels from the Chaco: one (Fig. 37) comes from the Toba section of Macharetí, and the other (Fig. 38) from an Ashluslay tribe traveling in northern Argentina.

/374 cont./

415 surmounted by two nipples, remains of stylized ears. These protuberances can be perforated and allow a suspension cord to pass through, which permits hooking the bowl to a beam of the hut (Fig. 41).

Spoons

412 Spoons are very common among the Chiriguano. Their
● 171 form connects them closely to those which have been made
172 known to us by the excavations carried out on the Bolivian altiplano and in northwestern Argentina. It is among the ancient populations of this region that we must seek the origin of this cultural element (on this subject see Nordenskiöld, 9, pp. 91-92), of which the Chiriguano have faithfully kept the primitive aspect and even certain peculiarities such as the indentations of the handle which /Plates XIX-XXI appear here/ /375/ are seen on one of our specimens and on one discovered in the Puna de Jujuy (Pucara de Rinconada) by Boman (2, Vol. II, Plate LIX, Fig. 142).

Beside these spoons, whose use spread under the influence
412 of the civilized peoples of the west, the Chiriguano kept the
237 most rudimentary forms of this utensil: the valves of a fresh-
824 water mollusk (anodonta) (in Chiriguano: inta) are often used by them to eat liquid dishes; the shell of the fruit of a bignoniacea (?) opened lengthwise also appears in the north of the Chiriguano territory as the survival of a time when spoons were still unknown to them (Fig. 44).

412 Some small calabashes, ovoid or round, with a jutting peduncle, can, after being cut through the middle, replace
[171] wooden spoons to advantage (Fig. 45). It was in this natural form that the spoon spread in tropical America where Andean influence did not make itself felt. The Chiriguano do not disdain using these half-calabashes to dip into the bean pot or the meat broth. Calabashes like the one of Figure 46 /see p. 139/ take the place of ladles.

/375 cont./

Calabashes

415 In each Chiriguano village calabashes are as abundant as pottery (see Fig. 47 /see p. 139 /). The huts are full of them. They are of every shape and size, from the spoons we spoke of to the big basins in which the kãwi is distributed on feast days.

[286] The calabashes which are ovoid or gourd-shaped are generally enveloped in a kind of rudimentary net of vegetable fibers or leather thongs, which allows them to be carried in the hand or hung (1). In them is put either water, or grain 415 and seed, or roasted flour, or finally roucou or kalasapa powder saved for feast days (Plate XX, 1 and 2; Plate XXI, 3 and 4).

[322] Some calabashes are provided with a lid which the Indians make by cutting a calotte with star-shaped edges in the still green fruit, and this then forms a hermetic closing. The lid is fastened on by means of a small cord which, when pulled, suffices to close the calabash /376/ (Plate XX, 4 and Plate XXI, 2). Gourds whose opening is small in diameter receive a fragment of a shelled ear of corn as a stopper. /Figs. 42-47 appear here./

[121] Painted, pyrographed, or incised calabashes will be the object of a special study.

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1. Nordenskiöld (10, p. 97) has given the list of the South American tribes who put their calabashes inside a net to carry or hang them. This contrivance is widespread on the continent and its distribution is certainly greater than that indicated by Nordenskiöld, but travelers generally take only slight interest in such details, which are nevertheless important. The Kaingúa of Paraguay encompass their calabashes with wembé bark just like the Chiriguano (see Ambrosetti, 2, p. 716).

Choroti SK6
Araucanians SG4
Tupi-Guarani SL6

/377/

Wooden Bowls and Basins

C
415 The Chiriguano also use wooden bowls (Fig. 49). I do
●171 not know whether they make them themselves or receive them
439 from the half-breeds of the /Fig. 48 appears here/ San Luis
region. In this latter case the Chiriguano of the San Luis
(Entre-Rios) region would be the only ones to make them. In
Tarija /Figs. 49-50 appear here / where these bowls are much
sought after by the half-breeds, they were indicated to me as
coming from that zone. The rare wooden bowls which /378/
I saw at Caipipendi had been bought by the Chiriguano in the
course of their trips. The same origin must be attributed to the
wooden troughs found among the Chiriguano who live near the
Quichua half-breeds of Tarija department. These basins are
Ci used for washing food and also as bathtubs. The Choroti have
415 wooden dishes (Nordenskiöld, 9, Fig. 20, p. 88) which have
177 a shape very similar to that of the trough reproduced here
(Fig. 50) and which doubtless were introduced among them
A either by the ancient Quichua or by the half-breeds. Among
415 the Araucan of Argentina wooden basins are found, which are
171 similar in every detail to those of the Indians and half-breeds
of Bolivia and the specimen pictured here.

Chapter V

Tools of the Chiriguano

C
412 The work tools the Chiriguano use nowadays are almost
178 all of European manufacture. Here and there the ancient forms
[177] were kept when stone or bone were replaced by iron. Witness
the adze of Plate XXII /see p.143 / which constitutes a curious
survival of the eared or T-shaped ax certainly adopted by the
Chiriguano after their migration and their establishment at the
T-G foot of the Andes. This type of ax is unknown to me from any
[412] other Tupi-Guarani tribe and is rare in the area occupied by
[184] the different nations belonging to this linguistic family (see
Rivet, 1, pp. 149-155).

Modern Quechua SE24

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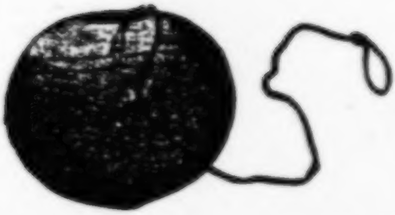

Fig. 48. Calabash hung by means of a transverse stick. Prov.: Ivu. (1/3 nat. size.)

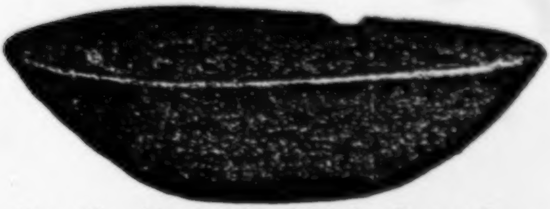

Fig. 49. Wooden bowl (sua). Prov.: Caruruti. (1/3 nat. size.)

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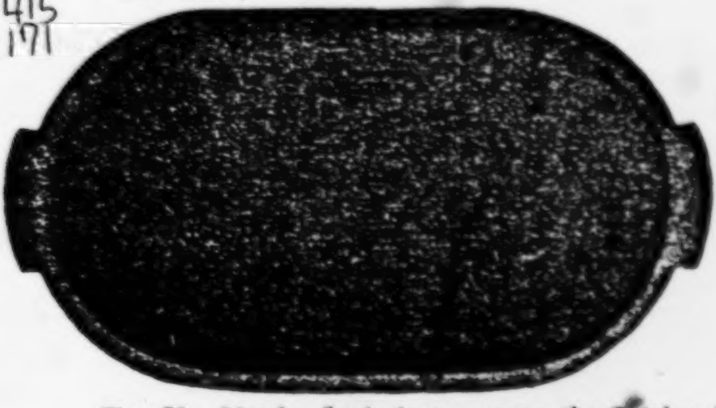

Fig. 50. Wooden basin in use among the Quichua Indians and half-breeds of the department of Tarija (Bolivia) and sometimes also among the Chiriguano.

/378 cont./

412 The specimen I am publishing here was still giving good
114 service to its owner, who gave it to me with regret and only
●171 for a large sum of money. The presence of the eared ax among
178 the modern Chiriguano invalidates the allegation of Nordenskiöld
(14, p. 120), who places it among the cultural elements which
have completely disappeared in South America. It survived
[181] thanks to the prodigious conservatism of the Indians. I am
convinced that several of the objects whose disappearance is
attested to by Nordenskiöld will perhaps be found in some
tribe now living, when we have more abundant ethnographic
material from South America than we now have at our disposal.

412 Another very interesting peculiarity of this ax is the bent
171 shape of the handle, to which the blade is securely fastened
with leather thongs. The distribution of the bent-handled ax
has been traced by Linné (2, p. 202). Few tribes of South
America have continued to use it up to our day. They are:
the Colorado of Ecuador, the Tukano /Tucano/, Tariana,
and other tribes of the /Plates XXII and XXIII appear here/
/379/ Caiary-Uaupés, the Tehuelche, and the modern
Quichua /Quechua/. Among the Indians of the Caiary-Uaupés
the tool lost all practical value and finally became a simple
dance accessory (Koch-Grünberg, 2, Vol. I, Fig. 225, p. 350).
/Fig. 51 appears here./

The bent ax has been found archeologically in Peru (Chuquitanta: Marquez Valley near Lima) and in Casabindo in La Puna de Jujuy (Argentine Republic). The specimens from Peru are designated as being hoes, which is possible. However, I shall call attention to the fact that the Chiriguano specimen from Caipipendí is exclusively a carpenter's instrument, which the Indians use for cutting the pieces of wood from which they make their furniture or weapons. /Fig. 52 appears here./

Figure 51 shows how modern axes of the simple neolithic ax type can be hafted exactly like their stone prototypes. The similarity of this ax to the stone ones used up to today by the Guayaki extends to the somewhat arched shape of the handle and to its slightly swollen upper end (La Hitte, Plate IV, 9).

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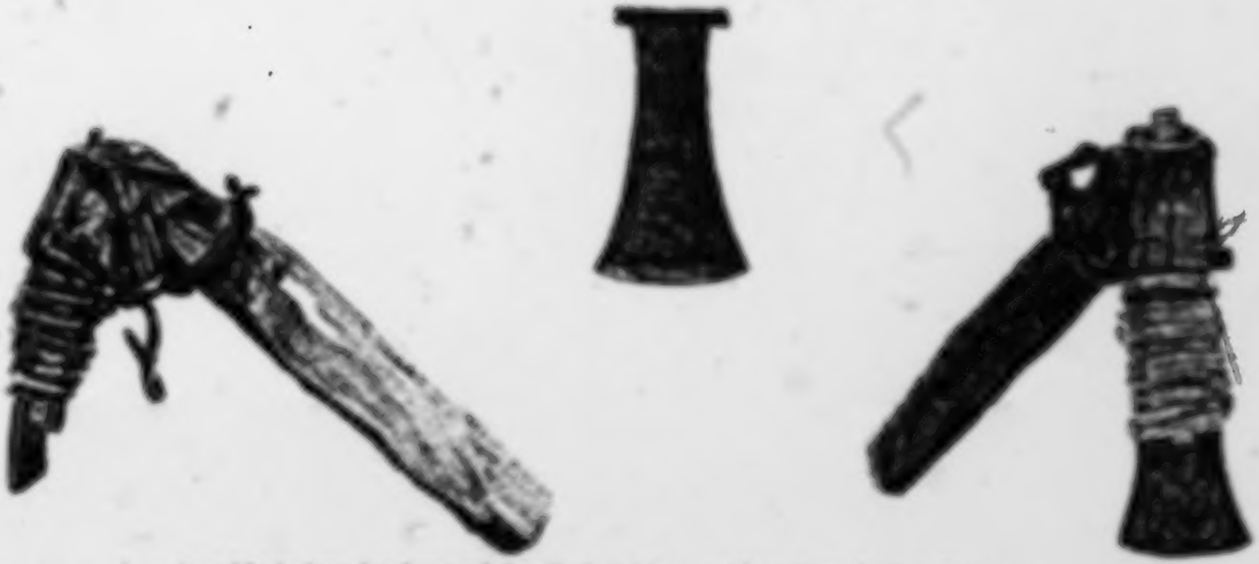
Plate XXIII



[illegible] iron blade has the form of the T-shaped axes of ancient Peru. Prov.: Caipipendi. (1/3 nat. size.)

/379 cont./

412 Still hafted in this way are the stone axes of the Indians
191 of the upper Xingú (Steinen, 7, p. 197) and the Kaingang /Caingang/ of southern Brazil (Nordenskiöld, 15, Fig. 17, p. 38) and the iron cutting tools of the Mataco-Vejos (Nordenskiöld, 15, Fig. 70, p. 44) and the Yamana (?) of Tierra del Fuego (id., 14, Fig. 45, p. 87) which replaced the ancient stone celts.

172
412 Plate XXIII /see p. 144/ reproduces a series of stone axes coming from the region of Caipipendí, Ivu, and Ibopeytí. The Caipipendí axes are all provided with a groove. Of the two axes with heels one was found at Ibopeytí and the other at Ivu.

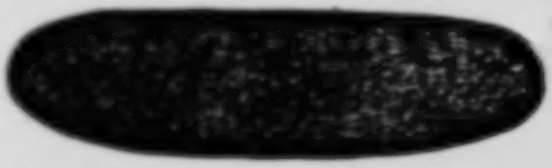


Fig. 50. Stone roller used as a grinder on a flat stone. Archeological piece found at Ivu. (1/4 nat. size.)

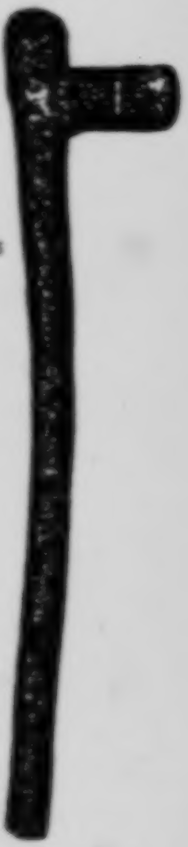


Fig. 51. Iron ax of the type called simple neolithic ax, provided with a handle like the ancient stone axes. Prov.: Caipipendí. (1/8 nat. size 4.)

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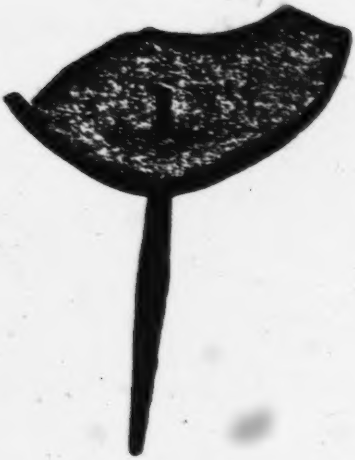

Fig. 53. Mold for making tin labrets (tembetayapua). Prov.: Yumbía. (1/3 nat. size.)

301 Mold for Tembetas

303
415 The tembeta, or labrets, of the Chiriguano are of tin.
325 They make them themselves with the aid of the mold pictured
here (Fig. 53). It is a calabash into which the fins of the
labret have been hollowed out, while the thicker central part
of the ornament corresponds to the end of a stick going through
[531] the calabash. The cavity produced in the central part of the
[439] labret is then filled with wax into which glass or turquoise beads
are incrusted. These come from ancient burial-places and are
sold to the Chiriguano by the half-breeds of Tarija.

Balances

276 The Chiriguano of the upper Pilcomayo and the Igüembé
177 valley prize coca quite as much as the Quichua of the altiplano.
● 171 Besides, it is from them that they got this vice. The fact is
known and does not need to be demonstrated. This custom

/380 cont./
276 spread among the Chiriguano recently for it has not yet spread
177 throughout the territory they inhabit. The Chiriguano who live
● 171 far removed from the half-breed or Indian populations of the Cordillera are not "coqueros," and only rarely does one meet among them some old man who accepts a quid of coca.

276 Ivu is the last point toward the east and north where I
171 could distribute my supply of coca to advantage. Nordenskiöld
302 (10, pp. 85-91) sought to demonstrate that the custom of
114 blackening the teeth went along cheek by jowl with that of chewing coca and derived from it. As a matter of fact, this habit has a very marked western distribution and follows the zone of coca cultivation.

276 The Chiriguano mix each quid of coca with the ashes
[824] reaped from a tree (*ulala*) whose scientific name I do not know. These ashes (*tanimbo*), which corresponds to the *llicta* of the Quichua, are contained in a small leather bag.

276 Coca is a luxury commodity which the Quichua Indians
439 or half-breeds come to sell to the Chiriguano. To avoid all
804 argument and all fraud on the part of unscrupulous sellers, the Chiriguano have recourse to balances of their own making. They fabricate them with /381/ two calabashes cut in half to serve as scales (Figs. 54 and 55). The balance with scales was in
[177] use in pre-Hispanic times /Fig. 54 appears here/ in the ancient Inca Empire (see Nordenskiöld, 16) and so I believed at first that among the Chiriguano it represented a survival of /Fig. 55 appears here/ the Andean influence, whose importance we shall see further on. Among the Chiriguano, however, this object is designated by the Spanish name /382/ *mbalanza*, which seems to indicate that they borrowed it from the half-breeds. The latter and the Quichua use them in their commercial transactions, but especially for weighing the precious coca. Perhaps it was the same in prehistoric times. There is nothing to prove that only metals were weighed, as has been supposed with respect to these ancient scales.

804 For weights the Chiriguano use old Bolivian silver coins
177 and express measures according to the old Spanish system. By a tacit convention a coin worth two modern sous is the equivalent of one ounce.

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This makes me think that glazing implies a technical process analogous to the one in use on the upper Pilcomayo.

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The Chaco Indians draw crude decorations on their vessels with *palo santo* resin, which they apply after firing. According to Nordenskiöld (*id. supra*), the Chané of the Itiyuro probably use the same method to decorate some of their vessels with black designs.

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After being painted, the vessel is put in the shade to dry for several days. It is only when the sides have acquired a certain hardness that the firing process is begun. The vessels are then taken to a spot where there is plenty of dead wood. A large quantity is collected, with which the vessels are covered from bottom to top. Generally, long pieces of bark are selected, which burn brightly.

They set fire to this pyramid of wood and, with a long pole, the /388/ potter watches to see that no brand burns directly against the walls, which would bring on a "shot of fire." When she ascertains that a vessel gives a metallic sound on being touched, she scatters the firebrands with her pole and, by rolling it, makes it go out of the fire.

It may happen that in the course of the firing a vessel may suffer some cracking. This is remedied by taking a little moist earth mixed with dung and applying it on the split while the vase is still hot. The fissure closes, but remains noticeable.

Classification of Chiriguano Pottery

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The figures which illustrate this text, the plates published by Nordenskiöld (10, pp. 155-162), and the diagram of Outes (3) give a better idea of the more common forms of this pottery than any description. However, a few remarks are called for.

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Vessels with a subglobular belly surmounted by a low, wide neck flaring at the top constitute, without doubt, the most widespread type. (Plates XXXV-LVII.)

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/399 cont./ It is already evident that the pottery of the Humahuaca region shows identical characteristics from the north of Jujuy to the vicinity of La Quiaca. To me the local variations seem absolutely negligible. Boman (2, Vol. I, p. 77) was already expressing himself in the following manner on the relations between these two regions: "If one wishes to compare the objects dug up in the Humahuaca region with the pre-Hispanic remains of other regions, they would be most like those of the Chichas." At

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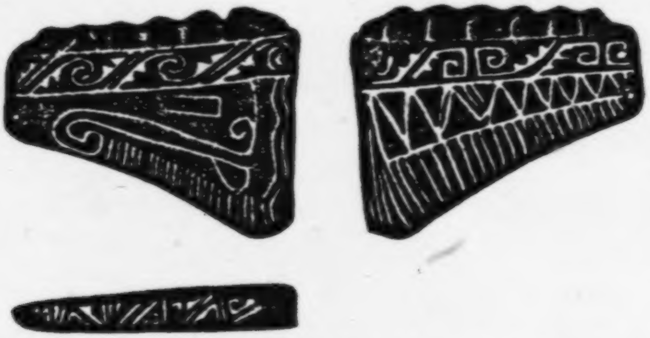

Fig. 67. Panpipe made of olive-hued stone, found on the upper Pilcomayo near the Chiriguano village of Ibopeytí at the same time as the vessel on Plate XXV. (1/2 nat. size.)

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AT Tolomosa in Bolivia, in the department of Tarija, the von Rosen mission (2, Fig. 175, p. 112) found an ornithomorphic dish, an exact replica of the famous puco of this type discovered at La Paya in the Calchaqui Valley.

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The Humahuaca-Chicha culture does not form an isolated bloc. It is more or less closely related to those whose remains have been studied in the northwest of Argentina in Diaguite territory, on the Puna de Atacama and de Jujuy, in the Atacama Desert, in the north of Chile and the extreme south of Peru. In the geographic area thus defined, it surely seems as though there was formerly a center of acculturation whose existence was pointed out only a few years ago.

Chane SF8
Atacama SG5
Prehistoric Chile SG3

/404 cont./

concerning the importance and the extent he gives it. To
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PC. the Chincha-Atacama sphere of influence belongs, precisely,
172 the culture of the Andean Chincha and Humahuaca peoples
177 whom the Chiriguano and their Arawak predecessors had as
121 neighbors for centuries.

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Ce
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2. Analysis of the Influences Exerted on the Fancy Pottery of the Chané and the Chiriguano

The criterion of form. -- The influences which have
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made themselves felt on Chané and Chiriguano pottery are
Ce manifested in both form and decoration. In the pages to
[121] follow I propose to note the most striking affinities between
Chiriguano and Chané vessels and those of the neighboring
regions, and also to determine the importance of Guarani or other
survivals which we meet here and there.

1. Vessels with a subglobular belly, short neck, flared
C lips, flattened base, constitute the most common type of fancy
Ce pottery (Plates XXXV-XL, XLVII-LIII, etc.). Pottery of this
[171] category lacks well-characterized counterparts in the Andean
zone. On the contrary, they resemble the jars for kaširi still
used by the Indians of Guiana and the Amazon (Koch-Grünberg,
2, Vol. II, Fig. 151, p. 227).

C
415 One of the yambuí (Plate XLVIII, 3)[1] of this type has as
handles on each side of the neck two little miniature vessels
of the same form as itself. In what is perhaps only the fancy
of a native artist appears nevertheless a concept peculiar to
the Andean peoples and one in harmony with their style.

2. The yapepo (Plate XLV, 1 and 2; LIX and LX)[2] are
subglobular vessels with a low neck, provided with a handle
C which extends from the rim to the belly; they can be con-
[171] sidered as yambuí in miniature. This category of vessels has
its equivalent in several points of the adjoining Andean zone.
Thus in Calama (Atacama Desert) and in Cagua (Yura canton,
Porco province) pots have been found which seem to be, from
the point of view of form, replicas of Chiriguano yapepo.
(Créqui de Montfort, Plate VII, Fig. 8, and Plate VIII, Fig. 11.)

[1] [See p. 229--Analyst]
[2] [See pp. 221, 244 and 245 respectively - Analyst]

P.A. /404 cont./

415 The cemeteries of the Isla de Tilcara have given numerous
172 specimens of this type (Debenedetti, 2, Fig. 98, p. 152; Fig.
C 101, p. 154; Fig. 104, p. 157; Fig. 106, p. 158; Figs. 109-
415 111, p. 162; Figs. 113-114, pp. 165-166), of which a specimen
● 171 has also been found in the Alfarcito in the Quebrada de Humahuaca
C (Debenedetti, 4, Fig. 15, p. 29). /Plate XXVII appears here./
415 /405/ Vessels whose appearance is obviously similar to that
171 of our yapepo were formerly used in Chile (Latcham, Fig. 17, p. 11).

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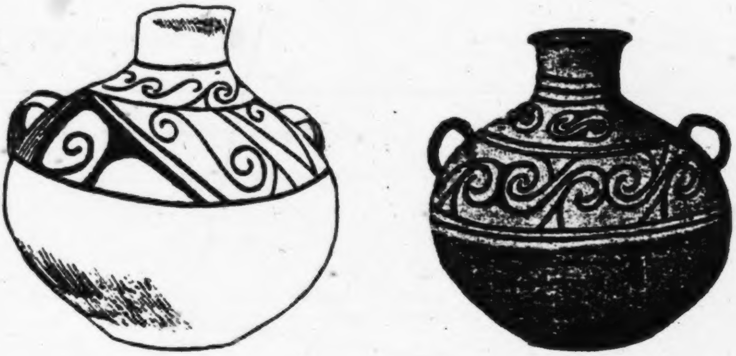

Fig. 70. The îru (a), drawn from Debenedetti, was found on the Isla de Tilcara. Vessel b is modern. It comes from the Chiriguano village of Yumbía. It attests to the fidelity with which the Chiriguano have kept to our day the ancient types of Andean pottery. (1/6 nat. size.)

C
415 3. The large yambuí of Plate LV, 3,[1] is not a common type
171 in South America. Jijon y Caamaño (p. 24, Fig. 15) cites only one specimen, coming from Imbabura in Ecuador, which was known to him outside of Chiriguano country.

4. The two yambuí of Plates XLI, 1,[2] and LV, 1[3] both come from the Ivu mission. Their form is unusual in Chiriguano country, but very interesting by reason of the analogy it offers with that of vessels dug up in Catamarca province in Caspinchango (Debenedetti, 5, Figs. 9 and 10, pp. 23-24) and that of funerary urns from La Rioja discovered and published by Boman (5, Fig. 4b, p. 24).

[1] [See P. 237--Analyst]

[2],[3] [See pp. 217 and 237 respectively--Analyst]

Chane SF8
Prehistoric Argentina SI 3

C /405 cont./
415 5. The *îru* of Fig. 70 *b* goes back into the class of the
● 171 vessels known as pseudo-apods, as some Argentinian archeologists
P.A. call them. As their name indicates, they are closely related,
[415] from the morphological point of view, to the vessels
[172] known as apods or more simply aryballuses, which constitute
in northwestern Argentina so many concrete proofs of Inca influence.
Ce Among the Chiriguano and Chané this type of pottery
[415] is exceptional, and the specimen of Fig. 70 *b* is a unique
[171] piece whose interest is considerably increased by the extraordinary
P.A. resemblance it bears to a vessel discovered in the cemeteries
[415] of the Isla de Tilcara (Fig. 70 *a*). These two *îru* have so many
[172] similarities between them that one could easily believe them
to have come from the hands of the same artist. In the regions
C near the habitat of the Chiriguano numerous vessels of this
P.A. type have been dug up. Odilia Bregante (p. 287) /406/ enumerates
415 for the specimens found in Jujuy province the following
171 localities: Saruga, Taranta, Pucará de Tilcara, Isla de
Tilcara, and Cochinoca, for the Puna de Atacama, Antofogasta
de la Sierra. In La Paya in Salta province these aryballuses
or aryballoid vessels are very numerous, and one of them
published by Ambrosetti (*6*, Fig. 42, p. 62) has on the upper
part of the belly a row of triangles with volutes, which we find
again on our specimen from the upper Pilcomayo.

C 415 Vessels of this kind are, as we have said, characteristic
171 of the Inca civilization. Similar jugs already appear in
Tacna during the Chincha or Chincha-Atacama period (Uhle,
4, Plate XVII, Fig. 4; Plate XIX, Fig. 1 and 1 *a*; Plate XX,
C Figs. 1 and 2). /Fig. 71 appears here./

[177] This type is so little diffused in Chiriguano country that
one could not invoke its occasional presence to attest to the
strong Inca influence of civilization on these Indians.

6. The miniature vessel of Figure 71 is also a unique
piece. If its distribution on the eastern slope of the Andes
C were not so sporadic, it would constitute an eloquent proof
[177] of the persistence of Inca tradition in Chiriguano pottery.
Actually, as Linné (*1*, p. 161) demonstrated with the aid of

C
/406 cont./

415 171 ● a map, these footed vessels "bakershaped" /quoted in English/ mark out the whole extent of the Inca Empire from Ecuador to Chile and Argentina. This is the first time, however, that their presence has been noted among the Chiriguano and outside the borders proper of the Inca Empire.

C [177] 7. As Nordenskiöld (10, Fig. 48, p. 162) established, the twinned Chiriguano vessels (Plate XXVII, 3)[1] also denote an Andean influence. As for that, it suffices to compare them with the ones from the Quebrada de Humahuaca (Debenedetti, 2, Fig. 144, p. 196).

C 415 531

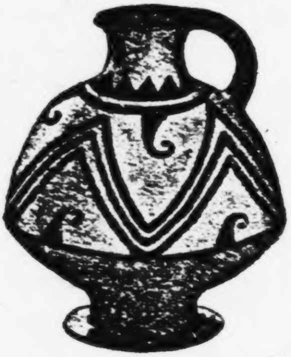

Fig. 71. Miniature footed vessel. Prov.: Cuevo. (2/5 nat. size.)

C 415 171 8. As for the vessels consisting of triple connected bodies (Plate XXVII, 4), Jijon y Caamaño (p. 26) believes them to be of Central American origin. "Their center of dispersion," he says, "must be located in a southern region of Central America, from where, perhaps through the medium of the Arawak, they arrived in the Chaco and Peru." This hypothesis is tempting.

9. The Central American origin of the footed bowl or "compote" (Fig. 72)[2] could not be doubted. Jijon y Caamaño (pp. 31-51), Rivet (2, pp. 8-9), and Linné (2, Map 6, p. 107) have amply demonstrated it. On the subject of one of the varieties of this type, Jijon y Caamaño (p. 34) makes the

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[1] [See p. 183--Analyst]
[2] [See p. 187--Analyst]

Arawakan Indians SR6
Guarani SM4

C A /406 cont./
415 following observation: "The dispersion and evolution of a type
171 of pottery whose /407/ origin must be assigned to the peoples
near the Isthmus of Panama can be due only to the Arawak, who spread it among the nations living beyond the Andes, in regions as southerly as the Chaco and the territory of Misiones (1).

> 1. Ambrosetti (2, p. 714) as a matter of fact represents Kainguá vessels with a circular foot. I doubt very much that these pots reproduce a primitive type. They are badly fired, badly modeled, asymmetric, and the foot, which is fastened to the vessel when the latter is finished, is easily detached from it.
>
> These vessels are perhaps crude imitations of European pottery.

A
171 In South America the Arawak have been the propagators of
Central-American culture among the primitive tribes located
C A east of the Andes."
415 10. The distribution of vessels with a ribbed belly, of
171 which I acquired a marvelous specimen in the Caipipendí
C valley (Plate XXVI, 2),[1] is almost the same as that of the
[126] "compotes," and we can, as with the latter, rank them with
the pottery which shows a Central-American origin /Fig. 72 appears here/ and whose dispersion was the work of the Arawak (Jijon y Caamaño, p. 5, Fig. 1 D).

C 11. The vessel of Plate XXVII, 2[2] is composed of two
415 superimposed domes: one in the shape of a truncated cone,
171 the other rounded. It comes from Ivu and is the only specimen
C of this form that I encountered in the course of my trip. An
[172] identical vessel was dug up on the upper Paraná by Ambrosetti
(3, plate between pp. 256-257, Fig. 5). Similar receptacles are still in use by the Yuruná /Yuruna/ Indians of the lower
C & Xingú (Steinen, 1, plate between pp. 266-267). The presence
415 of vessels of this type among the ancient Guarani authorizes us
171 to suppose that our specimen from Ivu represents /408/ the
172 survival of an ancient form of Guarani pottery which the
Chiriguano have not abandoned.

[1] [See p. 179--Analyst]

[2] [See p. 183--Analyst]

Chane SF8
Diaguita SG6

/408 cont./

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Ce Chiriguano have not abandoned. It is not out of the question,
415 however, that the Chané did not contribute toward preserving
171 this type,[1] if it was really they who made it known to the popu-
C lations of tropical America east of the Andes. Jijon y Caamaño
[415] (pp. 11-13) studied its distribution in the two Americas and
● [171] placed its center of diffusion in Central America. In Diaguite
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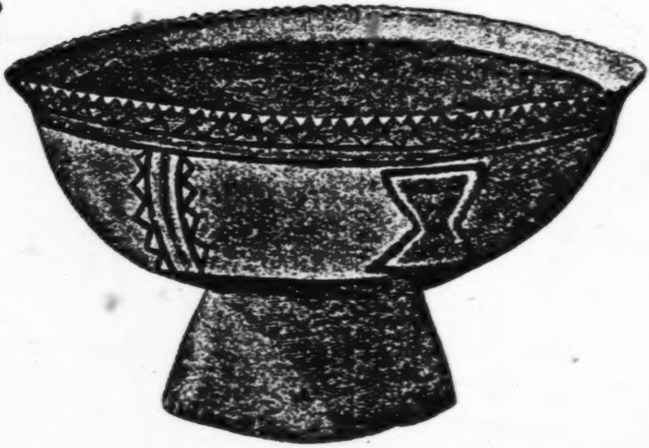

Fig. 72. Footed bowl or "compote." Black and red motifs on cream background. Prov.: Carurutí. (1/3 nat. size.)

C
415
In Diaguite
171 country we find pottery of a more or less similar aspect, but
D which must nevertheless be eliminated from this category.
415 It is indeed provided either with a tongue-shaped appendage or
531 with an anthropomorphic or zoomorphic figuration (Ambrosetti,
6, pp. 372-380).

[1] [i.e. The type depicted in plate XXVII, 2, p. 183 -- Analyst]

/408 cont./

415 12. The ornithomorphic vessel of Figure 73 seems to
● 171 have come from the hands of the ancient potters of the Isla
172 de Tilcara who, several centuries ago, used to make analogous
pieces, without a doubt servilely imitated by the Chané and
the ancestors of the Chiriguano (see Debenedetti, 2, Figs.
139-141, p. 191). Boman (2, Vol. II, p. 786, Fig. 193)
also publishes a bird-shaped vessel, perhaps of the pavo del
monte (Penelope obscura, Vieill.?), found not far from the
present-day village of Humahuaca and which, in addition to
its general appearance, has in common with our specimen

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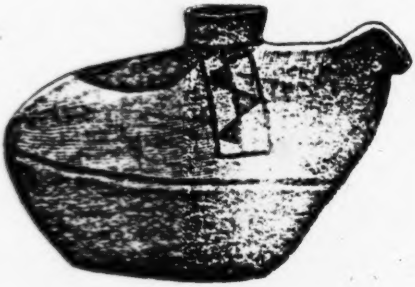


Fig. 73. Ornithomorphic vessel. Chiriguano. Motifs: pink and green. Prov.: Tarairí. (1/3 nat. size.)

415 from Tarairí designs painted on the sides which represent the
171
172 wings and tail.

The Chiriguano Indians of the Caipipendí valley and the
415 Ivu mission still like to serve chicha in vessels to which they
532 give the appearance of a bull (Plate XXVIII, 7-9).[1] Llama-
[273] shaped vessels have been discovered in the Quebrada de
[172] Humahuaca (Debenedetti, 4, p. 27, Fig. 14, and Odilia
[171] Bregante, Fig. 132, p. 147). Perhaps these are the prototypes
of the present-day Chiriguano specimens. Why suppose that
[114] these receptacles had solely ritual usage, as Mr. Debenedetti
thinks, when one sees the modern Chiriguano make an entirely
secular use of them?

[1] [See p. 190--Analyst]

Chane SF8
Prehistoric Ecuador SD3
Prehistoric Chile SG3

P.C. /408 cont./

Ce 13. The marvelous vessel of Plate XXVI,[2]1 is entirely of
415 Andean inspiration. The idea of giving the shape of a human
171 head to the neck of the yuro was not foreign to the ancient popula-
532 tions of the Quebrada de Humahuaca (Boman, 2, Vol. II, Fig. 190 and Plate LXXXII, Fig. f; and Debenedetti, 2, Fig. 136, p. 186). Up to the present time this region has not provided any
C vessel of this type which, by its beauty and the
[415] sureness of the modeling, /Plate XXVIII appears
→ here/ /409/ was comparable to our specimen from the Itiyuro. The woman who fashioned it was a worthy artist.

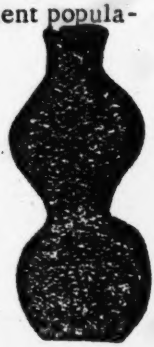
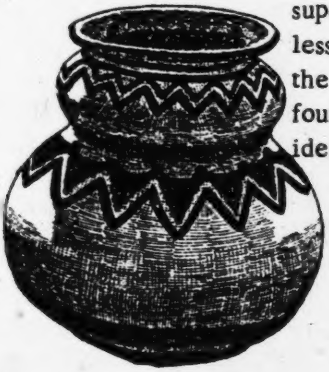


Fig. 74. Vessel painted red. Prov.: Carurutí. (1/4 nat. size.)

P.E In Ecuador, vessels with a globular
Ce belly surmounted by a human head are
415 frequent, but few specimens from this
171 region can compete with this Chané
532 masterpiece.

C 14. The vessels of Figures 74 and 75 and Plate XXVII, 1,[2]
415 are characterized by a narrowing which separates them into two
● 171 superimposed globular bodies of more or
172 less similar diameter. In the valley of the Loa River a vessel of similar type was found which presents the most surprising identity with the one of Figure 74. Montell (1, Fig. 34 e, p. 28), who publishes it, makes the following remarks about it.

[Text Continues on P. 191]



[531]
←

Fig. 75. Vessel decorated with red and black motifs. Prov.: Caipipendí. (2/5 nat. size.)

[2] [See p. 179 -- Analyst]
[2] [See p. 183--Analyst]

/409 cont./

415 171 172 "This particular form is not unique. It is found in the northern cultures of the coast of Peru and its area of dispersion stretches as far as Pachacamac and Ancon, including Lambayeque, Cajamarca, and Trujillo. East of the Andes, this type exists among the Chiriguano, the Ashluslay, and the Lengua. Specimens of it have been dug up by Debenedetti in Tilcara and in the Quebrada de Humahuaca. The find of the Loa River contributes to forming a link of this distribution uniting the /Fig. 75 appears here/ /see p. 189/ eastern zone with that of the Peruvian culture whence this type surely emanates.

Pots of this type show a striking resemblance to the signal trumpets of Guiana. Objects of this kind have been described by many authors and depicted by Gumilla and Roth. If one disregards the mouth and the base, one cannot distinguish these vessels from the terra-cotta trumpets. It is probable that this instrument was discovered independently in Guiana. In any case it is still too early to present theories on the possible connections between the two types, without preliminary research having been done to justify such comparisons."

To the distribution indicated by Montell must be added Molino del Puesto and Caspinchango in Catamarca province (Bruch, 2, Fig. 42, p. 54, and Debenedetti, 5, Fig. 14, p. 27).

415 171 15. Jugs with a globular belly or one in the shape of a truncated cone, with a short and narrow cylindrical neck from which often begins a small handle attaching at the other end /410/ to the belly of the receptacle (Plate LVI, 1, 2, and 4; Plate LVIII, etc.),[1] make up a very common type in all of the Chiriguano region which is in the hands of the missions. Up to the present the neighboring territories have not produced prehistoric vessels which could have served as models for the Chiriguano or the Chané at the time when Andean influence made itself felt on them. The only jug belonging to this type, outside Chiriguano country, is one found in Chile in Valdivia, which Medina (Fig. 184) reproduces in his great work on the antiquities

[1] [See pp. 238 and 240 respectively-- Analyst]

C /410 cont./
415 of this country (1).
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P.A.
[415] 1. Vessels of this type also show great similarity to the Araucan ones which were discovered in the Argentinian territory of the Neuquén. (San Martin, pp. 10-15, pp. 131 and 132.)

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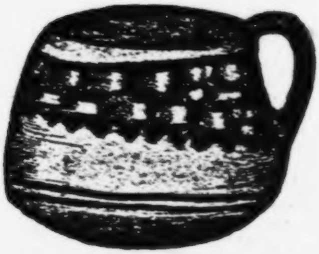

Fig. 76. Cup decorated with black checkerwork on cream background. Prov.: Igüembé Valley. (1/3 nat. size.)

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171 16. The little cup of Figure 76 is the only one of this shape I was able to collect. Like the vessels examined thus far, it constitutes by its aspect and decoration an Andean survival. Many cups have been discovered in northwestern
P.A.
[172]
[415] Argentina. Some of these specimens have been found on the Isla de Tilcara (Debenedetti, 2, Fig. 149, p. 206) and at Casabindo in the Puna de Jujuy (Lehmann-Nitsche, Pl. IV, 5 D).

C
[177] 17. Bowls have such a wide distribution in South America that their presence among the Chiriguano would not by itself be a sufficient argument to demonstrate the Andean origin of their culture. However, among these Indians, the numerous specimens of this category of receptacles found in each village show such similarities with the puco of the adjoining Andean regions that we are obliged to consider them as borrowed forms.

Prehistoric Argentina SI3
Prehistoric Chile SG3

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/410 cont./

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Thus, for example, the puco of Plate XIX, 2 and 4 [1] are nearly identical with certain dishes coming from La Poma, Salta province. (Dillenius, Fig. 7, p. 13.)

The Chiriguano puco (Fig. XIX, 3) could easily be mixed with a specimen from La Paya (Ambrosetti, 6, Fig. 185, p. 368), which, like it, has two nipples on each side of the rim.

C
[531]
The small bowl of Figure 77 carries on the rim two heads of a mammal stylized to the point that one can identify it as a llama or a puma, as one wishes. The two appendages in relief are perforated to allow a suspension cord to pass through. One would never finish enumerating all the receptacles of the Andean region which are decorated with the same motif. I shall limit myself to citing, in the countries adjoining the habitat of the Chiriguano, /Plate XXIX appears here/ /411/ several analogous finds. Thus, a dish of this type was dug up at Casabindo, on the Puna de Jujuy (Ambrosetti, 4, Fig. 49 b, p. 39, Vol. LIV) and at La Paya (Ambrosetti, 6, Fig. 181, p. 364).

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Several bowls (Plate XXIX, 1 and 6) of my collections are provided /Fig. 77 appears here/ with small nipples on the sides, whose use is, at first sight, enigmatic. As Rosen (2, p. 109, Figs. 167-188) has demonstrated, they are appendages which permit passing a small cord around the dish and hanging it. On some Chiriguano specimens these protuberances are perforated and a string passed through. By this means, /Fig. 78 appears here/ the bowl is suspended from the roof beams. Several from the Quebrada de Humahuaca (Debenedetti, 2, Figs. 60-63, pp. 111-112) also show these protuberances, whose use must have been the same as among the present-day Chiriguano. These nipples are doubtless handles or ears which, having lost all practical usefulness, were reduced /412/ to the state of simple ornamental motifs and not, as was believed, of still embryonic handles.

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[415]

[1] [See P. 135--Analyst]

Chane SF8
Arawakan Indians SR6
Guarani SM4
Peruvian Prehistory SE4

/412 cont./

C 415 171 PP 415 ● 18. To put an end to these comparisons, I shall call attention to two vessels (Fig. 78 a and b), one acquired in Ivu in the Chaco and the other in Tacna, and dating from the Inca period (Uhle, 4, Plate XXVIII, 7). A simple glance at the two figures permits the establishment of their perfect identity.

C Ce 415 171 In short, from these comparisons and the ones we made on the subject of pottery in common use, we can draw the following conclusions: Chiriguano and Chané pottery is, from the morphological point of view, closely related to that of the ancient populations of southern Bolivia and northern Argentina and therefore offers numerous points of contact with the C Ce [179] Chincha-Atacama civilizations. It still keeps traces of strong Inca influences (footed vessel (baker-shaped /in English/), aryballoid jars, ornithomorphic and anthropomorphic vessels, bowls, etc.). The ancient Arawak ethnic substratum is mani- A [415] fested in this sphere by the survival of several special types of pottery (vessels in the form of beakers or bowls (compoteras), vessels with a ribbed belly, vessels with three connecting bodies, etc.).

C Ce G 415 The pottery in everyday use is clearly of Guarani inspiration and in its general features has remained identical to those of the ancient Guarani of Bolivia.

C 531 184

Comparative Study of the Principal Decorative Motifs of Chiriguano Pottery and That of the Neighboring Andean Peoples

The triangle with volute. In the region of the upper Pilcomayo the fundamental motif of pottery decoration is the triangle whose apex is prolonged in a volute or spiral (Plates XXXII-XXXIII,[a] 136-199). This decorative element is repeated to repletion on all the vessels I collected from the village of Saladito to the valley of Igüembé. Elsewhere it becomes less frequent and takes on a more rudimentary form, which can be considered as further developed or degenerated.

[a] [See PP. 200-201 -- Analyst]

/412 cont./

531 184 Even on the upper Pilcomayo this design occurs in many variations according to the place or the artists: on certain pieces the volute which prolongs the triangle is clearly drawn (Plate XXXV, 1; XXXVII, 2; XXXVIII,[1] 2; etc.); on others it is no more than a hook more or less closed (Plate XXXII, 137-151). This last case is more usual. Finally, the hook itself is drawn with so little care that it is transformed into the simple arc of a circle, then into a straight line prolonging one of the sides of the triangle (Fig. 78 a).

Some vessels, generally outside the upper Pilcomayo region, /Plates XXX-XXXIV appear here/ /413/ present the same motif, but instead of the hook or the spiral the potter has painted a fret element (Plate XLI, 2, and XLIII, 1; LIV, 1 and 4)[2] more or less well executed. Thus one can follow the evolution of the spiral to the fret by going from one point to another of Chiriguano territory.

Most often these triangles with a volute are arranged in two rows and face each other alternately. When such an arrangement occurs, the potter always takes care to draw, along the line forming the volute, a parallel line of a different color, which, after following the inflections of the volute, goes to join that of the facing triangle. The figure (Plate XXXIII,[3] 178-194) thus obtained is a double volute in the form of a couchant S. It is particularly characteristic of the pottery of the upper Pilcomayo and the Igũembé valley. This double volute perhaps can be treated as an independent decorative element, witness the yambui of Plate XXXVI, 2, and LI, 3.

531 Sometimes, but rarely, the triangle with a double volute is replaced by an angle whose sides, by being drawn out, form a continuous line which unites these motifs to each other (Plate XXXVI, 1; XLVII, 3; LIII, 3).[4]

● [171] The origin of this motif is lost in the night of time. It appears already very stylized on the vessels of the Tiahuanaco period, coming from Tiahuanaco itself (Posnansky, Plate III, Figs. E and F) and from the Mizque valley (Nordenskiöld, 5, p. 95, Fig. 40).

[1] [See pp 211, 213 and 214 respectively--Analyst]

[2] [See pp. 217, 219 and 233 respectively--Analyst]

[3] [See p. 201--Analyst]

[4] [See pp 212, 226 and 232 respectively--Analyst)

A 531 192 C 531 191

/413 cont./

It is also met on most of the vessels from Tacna and Taltal, belonging to the period known as Chincha-Atacama (Uhle, 4, Plate XIX, Figs. 1 and 2; Plate XX, Figs. 1 and 2; Plate XXI, Fig. 2; Plate XXII, Fig. 4; Plate XXIII, Fig. 1; Plate XXIV, Fig. 2; and Guevara, Vol. I, plate between pp. 42 and 43 and between pp. 48 and 49).

These analogies with Chiriguano pottery become still more striking if one considers the details and arrangement of this motif. On a vessel from Tacna (Uhle, 4, Plate XX, 1) the volute takes off from two lines forming an angle, as on the *yambuí* of Plate XL, 1, published here. On the vessel from Tacna (Uhle, 4, Plate XXI, Fig. 2) the triangles with a volute face one another, and the inflections of the spiral are accompanied by a parallel line in another color. An anthropomorphic vessel found at Tacna (Uhle, 4, Plate XXIII, Fig. 1) is also decorated with hooked triangles which face each other alternately.

As for the frets of Uhle's Chincha-Atacama vessel (4, Plate XXII, Fig. 4), they are doubtless volutes which the potter's fancy modified.

One can as well consider as a derivation of the voluted triangle the hooks which, on several Tacna and Taltal vessels and on a Calama calabash, form vertical and horizontal rows (Uhle, 4, Plate XX, Fig. 1; Plate XXII, Fig. 2; Plate XXIII, Fig. 3; XXIV, /414/ Fig. 3, etc.; Guevara, Vol. I, plate between pp. 46-47 and 48-49; and Oyarzun, Fig. 11). With the Chiriguano the voluted triangle underwent an analogous process of simplification, but this evolution took place only in very rare cases and on pieces whose decoration was drawn with a certain negligence (Plate XXXII,[a] 139-140).

A 531 192

The textile fabrics from Arica discovered by Skottsberg (Figs. 41-42), which are kept today in the Göteborg Museum, exhibit the voluted triangle, among other motifs. Judging by their style, these specimens undoubtedly belong to Uhle's Chincha-Atacama period.

[a] [See p. 200 -- Analyst]

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/415 cont./

On the other hand, the excavations carried out on the Isla de Tilcara have produced only a few specimens of pottery whose ornamentation was curvilinear. Debenedetti (2, p. 89) considers the latter, for reasons which I cannot accept, as foreign to the locality. Nevertheless, he has reproduced in his book the decoration of two dishes which is made up of facing triangles with volutes (Debenedetti, 2, Figs. 53 and 54, pp. 88-89) (Fig. 79): and he notes the same design on two other dishes which he does not reproduce. In the same publication (Debenedetti, 2, Fig. 112, p. 163; Fig. 114, p. 168; Fig. 115, p. 168) are represented three vessels similar to the Chiriguano yapepo and also decorated with hooked triangles.

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/416/ The most interesting piece in this respect is the

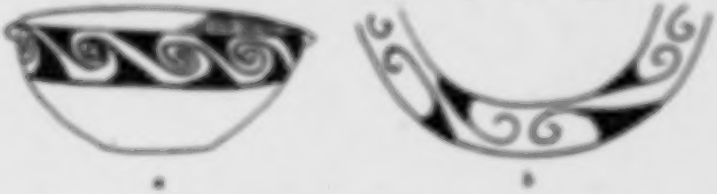

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Fig. 79. a, bowl from the Isla de Tilcara, whose rim is decorated with facing voluted triangles; b, border of a dish decorated with voluted triangles (Isla Tilcara) (from Debenedetti).

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yoro of Figure 79 b, reproduced from a drawing given by Debenedetti (2, Fig. 124, p. 178). We have already seen that its form is identical with that of a Chiriguano ïru I bought on the upper Pilcomayo. The same is true for the general elements of its decoration.

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The voluted triangle is found on three other pieces from the Isla de Tilcara (Debenedetti, 2, Fig. 160, p. 217; Figs. 161 and 163, p. 217), which Debenedetti (2, p. 210) classes among the pottery imported to the Isla de Tilcara and utilized by curacas /chiefs/. Our yambuí from the upper Pilcomayo, which from the artistic point of view are very superior to the specimens described by Debenedetti, have often been bought

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C /416 cont./

531 415 121 126 114 by me in humble cabins whose owners were certainly not curacas, but poor devils who had the luck to have a mother or grandmother who was an expert potter. If the criterion of Mr. Debenedetti were admissible, the crude pottery and the fancy vessels which can be bought in every Chané or Chiriguano village would be products of two different civilizations. C 415 In reality the fancy pottery is used on feast days for drinking chicha: and the other, more humble in appearance, is adapted to daily needs.

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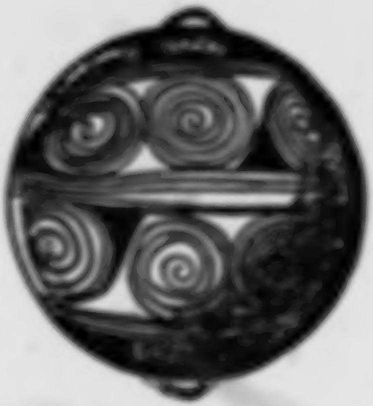

Fig. 60. Dish from Tilcara and decorated with red voluted triangles on a white background. (1/6 nat. size 2.)

PA 531 114 Besides, the voluted triangle is more frequent on the Isla de Tilcara than Debenedetti wishes us to think. In addition to the examples cited, seven others must be added (Debenedetti, 2, Fig. 26, p. 50; Fig. 30, p. 62; Fig. 40, p. 70; Fig. 44, p. 80; Fig. 103, p. 110; Fig. 105, pp. 110-112). A vessel from Alfarcito in the same Quebrada bears a triangle with volute on the inside rim of the neck (Debenedetti, 5, Fig. 13, p. 73).

Diaguita SG6
Prehistoric Argentina SI3

D /419 cont./

531 198 book (1). I strongly doubt that the triangle with volute and the triangle with fret have a separate origin. The second doubtless derives from the first.

PA 531 At Tinti on the Salta plain the motif Odilia Bregante speaks of is a triangle one of whose sides is stepped and which terminates in a fret which in turn interlaces with the one taking off from the following triangle (see Boman, 3, Plate XIV, Fig. b). D [531] [114] I cannot understand what arguments Odilia Bregante relies on in order to assert that no vestige of Diaguite culture exists in this place. The contrary seems to be true.

C PA 531 191 To sum up, the triangle with volute has a nearly uninterrupted distribution from the north coast of Peru to San Juan province in Argentina, and as far as central Chile. To the east it extends as far as the Pilcomayo and the Quebrada de Humahuaca.

The importance of this decoration increases in proportion as one moves from south to north. In Calchaqui country it is of secondary importance and constitutes an accessory motif; at La Paya it gains in preponderance and this asserts itself in the Quebrada de Humahuaca and on the Pacific Coast. In Chiriguano territory on the upper Pilcomayo it triumphs.

C 531 By itself this motif would constitute a meager proof of the existence of related cultures over the whole extent of this geographical area; but combined with other elements it acquires a very special significance.

C 531 191 The triangle with volute seems to have developed independently in the Guianas. At least I doubt very much that its occurrence in that region is due to a western influence. The motif adorns manioc graters coming from the Patamona tribe (Nordenskiöld, 14, Fig. 19 c, p. 53) and several Wapišana /Wapishana/ and Taulipang calabashes (Koch-Grünberg, 3, Vol. III, Plate XIX, Figs. 1-3).

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1. See, for example, Bruch (2, Fig. 32, p. 37; Fig. 66, p. 71; Fig. 70, p. 74; Fig. 85, p. 85; Fig. 90, p. 89; Fig. 130, p. 152) and Lafone Quevedo (2, Fig. 60, p. 384).

Diaguita SG6
Peruvian Prehistory SE4
Bolivian Prehistory SF4
Prehistoric Chile SG3
Prehistoric Argentina SI3

C /419 cont./

531 171 The S-shaped double volute (Plates XXXII-XXXIII,[1] 163-164, 167-197). I have already had occasion to insist on the fact that the S-shaped double volute was a motif closely associated with the voluted triangle. In certain cases, and, moreover, rare ones, this decorative element appears detached (see Plate XXVI, 2).[2]

P.P. [531] The double volute has been painted on several vessels from Tacna (Uhle, 4, Plate XXIII, Fig. 1; Plate XXIV, Figs. 2 and 3; and Guevara, plate between pp. 46-47). There it is once even framed by a line which follows its contour exactly as on some Chiriguano vessels (Plate XXXII, 162-163).

PB 531 On vessels found at Calama and doubtless coming from Cagua (Yura, Porco province, Bolivia) and even in the region of Cagua /420/ (Créqui de Monfort, Plate VII, Fig. 8, and Plate VIII, Fig. 11) an S-shaped decoration is seen which could be brought nearer to our double volute if its style were different. The ends of the curve are slightly pointed, and a dot is inscribed in each hook.

P.C. 531 Chilean potters have sometimes made use of the double volute to decorate their vessels, but a limited use (Latcham, Fig. 38, p. 16; Fig. 58, p. 25; Fig. 59, p. 26). P.C. [324] This motif is also carved in a block /Fig. 81 appears here/ of stone from the Chilean province of Antofagasta, between Santa Fe del Toro and Quillagua (Plagemann, Plate III). PA 531 In the Quebrada de Humahuaca the double volute embellishes the outside surface of the yuro from the Isla de Tilcara reproduced by Debenedetti (2, Fig. 124, p. 175).

At La Paya the motif is represented on the bottom of two ornithomorphic puco (Ambrosetti, 6, Fig. 131, and Boman, 2, Vol. I, Plate XV, Fig. 29).

D 531 [415] [764] A design in the shape of an S, but made up of a more or less wide band adorns the base or the belly of a large number of funerary urns of the Diaguite region and the bowls which closed them. This decoration /Plates XLVII-LIV appear here/ /see pp. 226-233/ /421/ is not to be confused with the one which has occupied us up to now because it is nothing but a

[1] [See pp. 200-201--Analyst]

[2] [See p. 179-- Analyst]

/421 cont./

C 531 171 The spiral as an independent decorative element has a much less wide distribution than when it is combined with the triangle it surmounts. In the geographical area which interests us it is known only on some pieces from the Quebrada de Humahuaca (Debenedetti, 2, Figs. 41 and 42, pp. 72-73; Bregante, Figs. 176 and 179, pp. 170-171), on a calabash from Calama (Oyarzun, Fig. 10), from the Puna de Jujuy and from the valley of Yocavil (Ambrosetti, 4, Fig. 70, p. 68, and Fig. 69, p. 72, Vol. LIV), on a puco from Pabellon in the Santa Maria valley, Catamarca province (Outes, 1, p. 19, Fig. 13).

C 531 Angles, triangles, and zigzag lines (Plate XXX, 1-46, Plate XXXI, Figs. 71-108, 127). Nearly all the yambuí and yapepo which form my collections are decorated on the interior rim, at the base of the neck, or on the upper part of the belly with interlaced angles, with series of triangles painted on the surface, which form denticulate bands. This decorative theme, simple and a bit monotonous, varies from one specimen to the other, according to whether the field of the triangles is sprinkled or surrounded with dots, whether the apexes are joined by angles or arcs of a circle, or, finally, whether or not these triangles are bordered by a broken line which they face.

C [184] Triangles and zigzag lines only rarely constitute the fundamental decoration of vessels. On the upper Pilcomayo, the yambuí of Plate LIII, 4, is the only one exclusively decorated with triangular dots and parallel zigzag lines. Some pieces from Ivu and Caipipendí are characterized by the same simplicity.

C 531 171 A 531 172 At Tacna and Taltal the series of triangular dots constituted a motif particularly dear to the populations of the Chincha-Atacama period (Uhle, 4, Plate XVII, Fig. 4; Plate *XVIII, Figs. 1, 2, and 4; Plate XIX; Fig. 1 a; Plate XXII,* Fig. 4; Plate XXIII, Figs. 3 and 4 and Figs. 21 and 22, pp. 40-41).

Prehistoric Chile SG3
Prehistoric Argentina SI3
Bolivian Prehistory SF4
Atacama SG5

C 531 171 /421 cont./

In Chile, on the pieces influenced by Chincha art, there is the same abundance (Latcham, Fig. 28, p. 14; Fig. 53, p. 21; Fig. 59, p. 26; Medina, Fig. 206). PC 531

PA 531 171 /422/ In the whole northwest of Argentina, borders composed of triangles painted, striped, or reticulated are extremely frequent and do not form a type characterized clearly enough for anyone to try to give the distribution in detail. The latter extends from the Quebrada de Humahuaca to the Yocavil valley (Bregante, p. 182).

C P.A. B.P. 531 171 One of the varieties of this motif, however, is worth examining closely, for it permits establishing a striking parallel between present-day Chiriguano pottery and that of northwestern Argentina and southern Bolivia. It consists of a denticulate band or series of triangular dots and one or several zigzag lines which run parallel to these triangles. This decoration figures in my collections on the specimens of Plate XLI, 1, and Plate LX, 4. The archeological replica of this ornamentation is furnished by a vessel from Tolomosa (Tarija department, Bolivia), from Pabellon (Santa Maria, Catamarca), from Chañar Yaco (Catamarca) (see Rosen, 2, Fig. 166, p. 109; Outes, 2, p. 11, Fig. 8; Lafone Quevedo, 1, Fig. 5 e and f; Huaca E., p. 42). The excavations of the Messrs. Wagner at Llacta Maucta (Santiago del Estero province) yielded fragments of a dish whose patterns belong in this category.

A 531 172 The triangles which stand out against a background sprinkled with dots (Plate XLVIII, 1) and which form a band on the yambuí of Plate XXXV, 2, have their prehistoric equivalent at Taltal on a vessel of the Chincha-Atacama period (Uhle, 4, Fig. 21, p. 40).

PA 531 171 Series of triangles arranged horizontally are very often associated with the decoration of apodal or aryballoid vessels, *which have been discovered in northwestern Argentina in such* large numbers (see, for example, Boman, 2, Vol. I, p. 297) and, in general, over the whole extent of the Inca Empire.

/422 cont./

531 171 Festooned bands (Plates XXXI-XXXII,[1] 129-131). The series of triangles with which we have been occupied are often replaced by festooned bands (see, for example, Plate XLIX, 3; L, 1; and LIII, 3).[2] The transition from one of these motifs to the other is, so to speak, imperceptible; it is sufficient for the triangles to be slightly rounded for them to take on the appearance of a band of festoons. In northwestern Argentina the same transformation has taken place several times. A good example of it is the vessels from the Jachal (Bregante, pp. 179-181).

Isosceles triangles joined at the apex (Plate XXXI, 116-122). Two isosceles triangles joined at the apex form a design schematically representing an hourglass. This motif is rather common on Chiriguano pottery. In neighboring regions it is less frequent and seems to be peculiar to the pottery of Inca origin. Nordenskiöld (14, Fig. 69 a, p. 157) has already pointed out the close resemblance of this figure as it appears on several Chiriguano vessels with the one which decorates the ornithomorphic dishes /Plates LV-LVIII appear here/ /423/ of Cuzco. The analogy extends to the perpendicular lines which separate each one of the facing triangles from the following ones. This decoration is typically Inca. The ancestors of the Chiriguano copied this motif on several Inca specimens exactly like the ancient inhabitants of Tilcara, La Paya, and Catamarca who drew them: some, on a vessel with a lateral handle (Bregante, Fig. 320, p. 268), others, on a cup (Boman, 2, Vol. I, Plate XII, Fig. 26, and Plate XIV, Fig. f), and the last on an apodal vessel (Outes, 2, Plate III, Fig. 5). Outside of the "aryballuses," or purely Peruvian type vessels, the "hourglass" is a motif of rather rare use. It was painted on a vessel from Fuerte Quemado published by Ameghino (Vol. I, Plate X, Fig. 333) and on a vessel from Punta de Balasto (Lafone Quevedo, 2, Plate VII, Fig. a). Other examples could be cited, but I have neither the intention nor the means of being complete.

[1] [See pp. 199-200--Analyst]

[2] [See pp. 228, 229 and 232 respectively--Analyst]

Prehistoric Argentina SI3

C /423 cont./

531 171 This decorative element is no stranger to Chilean pottery either (Latcham, Fig. 42, p. 18, and Fig. 45, p. 19; Medina, Figs. 180, 202, 206, etc.). It figures also on the base of an Araucan vessel found in the territory of the Neuquen (San Martin, Plate 15, Fig. III).

Tooth-shaped triangular designs enclosing diamond shapes between them have been pyrographed on a calabash from Calama whose ornamentation matches that of our Chiriguano vessels.

Concentric diamond shapes (Plate XXX, 52-56). The series of concentric diamond shapes drawn on a goodly number of vessels in my collections had already been painted on the pottery of the Chincha-Atacama period at Tacna and Taltal (Uhle, 4, Plate XX, Fig. 2; Plate XXI, Fig. 2; and Guevara, plate between pp. 42-43) and pyrographed on the Calama calabashes (Oyarzun, Fig. 6). P.A.

[531] This design is classic, so to speak, on the aryballuses from Argentina (Boman, 2, Vol. I, Plate XVIII, Fig. 43, and Outes, 2, Plate III, Fig. 2).

PA 531 Reticulated design (Plate XXX, 59-64). Several vessels in my collection have a reticulated band on the belly or neck. On the vessel of Plate LIV, 2, the triangles have this detail. On the subject of this motif, Odilia Bregante (p. 162) expresses herself as follows: "Reticulated decoration is found in the middle of the Yocavil valley beside pieces which bear the symbol of the triangle with spiral and the stepped element and even in modern cemeteries like that of Chañar Yaco (see, for example, Lafone Quevedo, 1, Plate VII, Fig. a). But it is in the northern regions, in Salta and Jujuy, that the greatest number of specimens of this reticulation are found and where it enters into the composition of characteristic embellishments. On the Isla de Tilcara, in the Pucará de Tilcara, and in other localities, the archeological material which includes this design forms the most interesting type of pottery and is abundant enough to be classified."

Prehistoric Argentina SI3
Prehistoric Chile SG3

P.A. /423 cont./

531 Some vessels from the Isla de Tilcara and the Pucará de
C Tilcara, /424/ as a matter of fact, have a reticulated band on the
531 rim, like our Chiriguano vessels. (Debenedetti, 2, Fig. 45, p. 79,
171 and Bregante, Fig. 164, p. 166.)

PC In Chile we encounter bands, triangles, diamond shapes,
531 reticulated rectangles, and there again the unity of these different cultures in whatever has to do with pottery asserts itself. (Latcham, Figs. 25-28, p. 14, and Bregante, Figs. 232, p. 192.)

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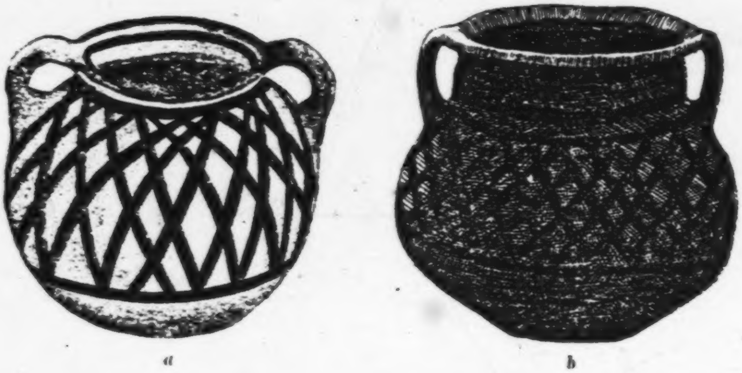

Fig. 82. Vessel b comes from the Chiriguano village of Tintapaw (upper Pilcomayo). It offers an extraordinary resemblance to vessel a from Tilcara. (1/2 nat. size.)

000 Figs. 25-28, p. 14, and Bregante, Fig. 232, p. 192.)

C Checkerwork (Fig. 76). A cup I acquired in the Igüembé val-
531 ley is decorated in a brown and white checkered design. This is the
171 only example I know in Chiriguano country. In northwestern
PA Argentina this motif has a very wide distribution: it extends from the
[531] Quebrada de Humahuaca to San Juan province (Bregante, p. 196).
[171] It was common in Chile (Latcham, Fig. 7, p. 7; Fig. 41, p. 18;
PC Fig. 55, p. 22, etc.). In the post-Columbian period it was still
[531] in use among the Araucan of southern Mendoza (Métraux, 6, Fig. 12, p. 50).

Atacama SG5
Prehistoric Argentina SI3
Chane SF8
Diaguita SG6

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Crenels, broken lines, Z-shaped lines (Plate XXXII, 154-155 and XXXIII, 200-206). While trying to define in the preceding pages the decorative style characteristic of the Chané of the Itiyuro and the Chiriguano of the region of the Franciscan missions, I mentioned single or multiple lines which, running around the belly of the vessel, form triangles, crenels, and Z's with elongated or linked strokes. At first sight these apparently capricious motifs seem to escape all comparison and one would almost be tempted to believe them autochthonous or constituting reminiscences of Guianan art. Nevertheless, their counterpart is found in the archeology of northwestern Argentina and, as expected, in that of the Quebrada de Humahuaca.

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Debenedetti (2, Fig. 75, p. 132, and Fig. 78, p. 135) reproduces a goblet found on the Isla de Tilcara, which has on its lower part a band /Plates LIX and LX appear here/ /425/ composed of three parallel lines broken at right angles. Mr. Debenedetti rightly compares this decoration with that of Chané vessels, of which he shows an example he attributes erroneously to the Choroti. The same remark may be made about some engraved vessels from the Arroyo del Medio, which in some respects are similar to our Chiriguano vessels (Boman, 2, Vol. II, Fig. 207, III, p. 843).

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Much more striking yet is the resemblance between the Chiriguano yambui of this type and two vessels from the Diaguite region, one found at Molino del Puesto (Fuerte Quemado, Catamarca), and the other at Hualfin (Catamarca), both of which have been published by Bruch (2, p. 87, Fig. 88, and id., 2, Fig. 11, p. 8, and Fig. 27, p. 13). A puco from Llacta Mauca, province of Santiago del Estero, offers a similar design, to judge from a sketch by Mr. Duncan Wagner. There can be no doubt as to the Andean origin of this type of decoration.

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Z-shaped motifs stand out again on a vessel from Tacna of the Chincha-Atacama period (Uhle, 4, Plate XXI, Fig. 1) and from San Felipe, Chile (Medina, Fig. 68).

Diaguita SG6

C /425 cont./

531 The large triangles which run around the belly of the îru and
● 171 yambuí from the mission region strongly resemble an analogous
motif which covers the outside surface of vessels made by the
Neuquen Araucan (San Martin, Plate XV, Fig. 3).

Eyebrow-shaped design (Plate XLIX, 4).[1] A vessel from Saladito
(upper Pilcomayo) has as its only decorative motif a strange deco-
ration in the shape of a stylized eyebrow which stands out in white
against a red background and is situated on the neck. This design
D is made up of two parallel lines separated by dots. In the presence
[415] of this curious motif one cannot help thinking immediately of
[531] the human faces painted on the funerary urns of the Diaguite
[764] region. The facial organs are overhung by a gigantic superciliary
arch which, starting from the tip of the nose, descends to the
height of the ears. The manner in which this part of the head
is drawn recalls strongly the figure we are concerned with here.

Cross. The vessel of Plate LX, 2, is decorated on the belly
with a series of crosses inscribed in diamonds. This sign con-
stitutes a decorative motif of which the present-day Chiriguano
make exceptional use. Like the majority of the motifs painted
on their vases, this one has no particular significance. A calabash
from the same region is also decorated with pyrographed Maltese
D crosses (see Plate LXI, 1 /see p. 252 /). We know the frequency
[415] of this ornamentation, symbolic or not, on the funerary urns of
[531] the Diaguite country, principally of the Santa Maria region
[764] (Catamarca), a frequency such that it warranted a book by
Quiroga, some of the illustrations of which are interesting.

The cross appears also on a Taltal vessel of the Chincha-Atacama period (Guevara, plate between pp. 46-47 and 50-51), on a calabash from Calama /426/ (Oyarzun, Fig. 10), on another from the Puna de Jujuy (Ambrosetti, 4, Fig. 70, p. 68, Vol. *LIV), and on a box from Morhuasi (Boman, 2, Fig. 75, Plate* XXVII), etc.

Representation of the human face. The human face is not
C reproduced on any of the vessels I collected. Nordenskiöld (10,
[532] Fig. 28, p. 137) shows and describes a pot on whose rim a face
was represented: the nose was in relief and the other organs painted
on it. The similarity of this motif and the one decorating some
pieces from the Andean region does not need to be emphasized.

[1] [See p. 228--Analyst]

/426 cont./

531 ● 171 Sign of unknown significance. On the Macharetí yambui (Plate LII, 2)^{2} was painted a crescent-shaped sign having in its concave part two dashes perhaps representing feet. The subject is doubtless a stylized bird, a presumption all the more plausible because another vessel from the same locality and made by the same hand is decorated with animal figures (dogs and toads) (Plate LII, 1).

This mysterious sign is very similar to the one found on a puco from Tolomosa in the Tarija department (Rosen, 2, Fig. 175, p. 112) and on some dishes from La Paya. These designs are also more or less stylized pictures of a bird. (Boman, 2, Vol. I, Plate X, Fig. 22, and Ambrosetti, 6, Figs. 35-40, pp. 56-61.)

Zoomorphic representations. Animal figures are rare in Chiriguano pottery, but their occurrence only brings out the better the similarities of this art to that of the neighboring Andean regions. The rows of yaku (pavo del monte) on the yambuí from the Aguaray are the counterpart of the nandus on the Diaguite funerary urns and the La Paya birds. The dog on the vessel in the plate appears nearly identical with the bottom of a puco from Molino del Puesto, Catamarca. (Bruch, 2, Fig. 70, p. 72.)

531 171 105 The comparisons we have made could doubtless be extended and many another relationship noted between the modern pottery of the Chiriguano and that of the populations which have today disappeared from the Bolivian altiplano and northwestern Argentina. To continue such an investigation would be superfluous, for there is no one acquainted with the art which formerly flourished in the Andean and Chiriguano regions who would hesitate to establish a relationship between the two and would not have the second derive from the first.

As one might logically expect, these similarities become more numerous and more striking in proportion as one leaves the south and advances toward the north into the Andean zone which runs parallel to the habitat of the Chiriguano and Chané. When eastern [172] Bolivia is methodically explored, models of the vessels which the ancestors of the Chiriguano admired and copied will be found.

^{2}[See p. 231 -- Analyst]

C /426 cont./
531 Lacking them, the study we have pursued brings us the estab-
● 171 lishment of a very important fact. The existence on the upper
172 Pilcomayo of a pottery /427/ closely related to that of the
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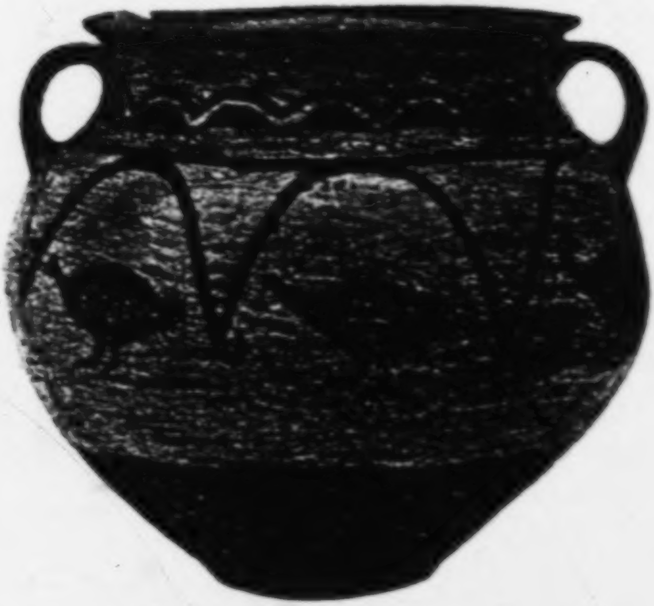

Fig. 83. Chané vessel. Prov.: Tuyuntí (Aguaray, Salta Chaco). On the belly: series of yakú (pavo del monte) in blackish brown on white background. (1/3 nat. size.)

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531 Quebrada de Humahuaca is an indication which proves in a sure
171 way that the art of the former inhabitants of these regions was
172 identical to that of their neighbors, and perhaps racial brothers,
105 of the Bolivian altiplano.

S Apropos of the Chiriguano, I believe it is wrong to speak of
121 Andean or Inca culture. The first of these terms is too vague and
531 the second partially false. In this chapter I have tried to demon-
171 strate that Chiriguano pottery exhibits close affinities with that
105 of the civilizations which, by their numerous points of similarity,
seem to have undergone a Chincha or Atacama influence and
which Preceded Inca Culture.

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which preceded Inca culture. If one compares the present-day pottery of the Chiriguano with that of the Quicha /Quechua/ of Cuzco, certain analogies will appear, but they will be neither abundant nor conclusive enough to establish a direct filiation. Aryballuses are missing or rare, ornithomorphic dishes seldom found, etc.; on the contrary, we have seen how multiple and close the ties are between this pottery and that of the Chincha-Atacama period. Chiriguano pottery, in relation to that of Cuzco, is in a situation analogous to that of northwestern Argentina: on an Andean but original base, influences from Cuzco have been superposed. This Inca action on the Chicha is attested to even today by /428/ the presence among the Chiriguano of footed vessels of the purest Inca type and apodal ones of the same origin. Arising from the same influence, one may add certain decorative motifs, with which I have already dealt.

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Arawak and Amazonian tradition is scarcely represented, except by footed bowls (compoteras), vessels with a ribbed belly, those with a body in the shape of a truncated cone and a subspherical belly, and perhaps by some motifs (T-shaped figures, Plate XXXVIII, 1).

The conclusion of this chapter will be: there exists today and for some years to come a civilization which, closely related to that of the Chicha, continues an art earlier than that of the Inca but influenced by them. May this fact make archeologists cautious!

Chapter VII

Calabashes

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The second art in which the Chiriguano excel is pyrography and engraving on calabashes. When pottery-making was an essentially feminine activity, pyrography was the province of the men.

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Nordenskiöld (9, pp. 233-236) thinks, completely wrongly it seems to me, that pyrography is of Andean origin. He advances in support of this opinion the advantages that knowledge of metal offers to this art. Nevertheless, the populations of the

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Guiana SR1
Guato SP15

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/428 cont./ Nevertheless, the populations of the upper Xingú where Andean influence certainly was never felt have pyrographed calabashes, as do the Guató /Guato/ of the upper Paraguay. Pyrography is equally in use among the Indians of Guiana, on whom any influence by Inca civilization is very problematical. The distribution of pyrography in itself demonstrates that there is no need at all of possessing metal objects in order to practice this technique.

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If one compares the motifs which decorate the calabashes I collected in the Chaco with those exhibited by the pyrographed calabashes found in northwestern Argentina, one is struck by the similarity of their style and the numerous analogies of detail they have in common. Thus, the Maltese cross which decorates a calabash from Jujuy (Ambrosetti, 4, p. 68, Fig. 70, Vol. LIV) is found again identically on the calabashes of Plates LXI, 1; LXII, 1; and the volutes of a maté from Tastil (Boman, 2, Vol. 1, Fig. 84 a) have their counterpart in the hooks incised on the specimen of Plate LXI, 2. On the fragment of a calabash discovered in the same region (Boman, 2, Vol. I, Plate XXXII, Fig. 84) and on another specimen from La Paya (Ambrosetti, 6, Fig. 288, p. 524), we have the prototype of the checkerwork which so often embellishes /Plates LXI-LXXI appear here/ /429/ Chiriguano calabashes (Plate LXI, 1 a, and Plate LXIV, 2). The reticulated bands which frame the decoration of one of the Calama calabashes (Boman, 2, Vol. II, Plate LXXV, Fig. 176 b) are frequently incised on those of the Chiriguano (Plate LXVI, 1 and 4; Plate LXIX, 3, etc., for example), just like the rows of triangles on a blackened field which appear on some calabashes from the Puna de Jujuy (Ambrosetti, 4, Figs. 61-63, pp. 65-66; Figs. 70-71, pp. 58-69, Vol. LIV) and on the fragment from La Paya already mentioned. The zigzag line which stands out in white on the reticulated background of one of the Calama calabashes

[Text continues on p. 265]

C 531 171

/429 cont./

(Boman, 2, Vol. II, Plate LXXV, Fig. 186 c) reappears nearly identical on the pretty calabash of Plate LXII, 2.

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I can give no better argument in favor of the close analogy between the calabashes of the Andean region and those of the modern Chiriguano than by publishing the calabash of Plate LXII, 3 a and b, found in Diaguite territory in Catamarca province ("La Quebrada," Valle del Cajón). Its decoration is composed of incised and finely reticulated bands on a blackened background. The hooks which leave from the circle engraved on the top of the calabash and the sides of the latter strangely recall analogous motifs we have seen on Chiriguano specimens.

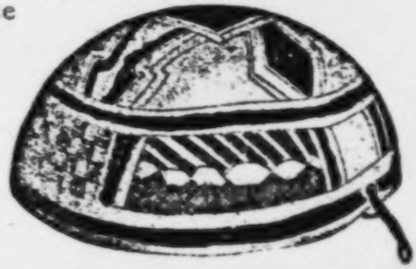

Fig. 84. Incised and pyrographed calabash. Prov.: Caratindi (Iguembé Valley). (About 1/2 nat. size.)

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The spiral, which seems to have been a motif especially dear to the pyrographers of northwestern Argentina and the Atacama Desert, does not occur on any of the specimens in my collections, if one does not want to consider as rudiments of spirals or as degenerated spirals the hooks we see on some Chiriguano calabashes (Plate LXI, 2). It is interesting to ascertain that the spiral and the voluted triangle of Andean calabashes are typologically closely related to analogous motifs which the Chiriguano women of the upper Pilcomayo paint on their vessels. If these designs have been better preserved in pottery than in pyrography, it is doubtless due to the fact that the first art has remained closer to its origins. The women, who have the monopoly of it, are more conservative than the men, who decorate the calabashes.

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531 ●171 [114] On almost all the calabashes in my collection, pyrographed designs alternate with incised motifs. Perhaps it is the same with the calabashes of the Andean region. Judging from the excellent photographs which Boman (2, Vol. II, Plate LXXVI) gives us of them, and from /430/ the specimen from the Calchaqui valley which I am publishing here, this scholar erroneously considers them as having been entirely pyrographed. When a Chiriguano incises a design with a knife on a calabash, he is always careful to fill the engraved lines with ashes to make them stand out. At first sight this process may be confused with true pyrography.

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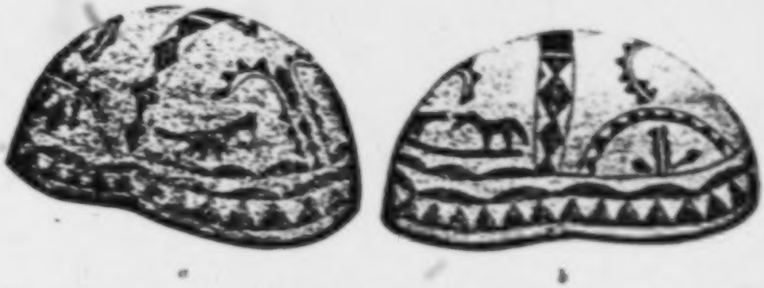

Fig. 85. a and b. Engraved calabash. Only the rim has been lightly pyrographed. On one side (a) is seen a feline animal (jaguar or puma), on the other (b) a fox (?) and a bird. Prov.: Masaví (Igüembé Valley). (About 1/2 nat. size.)

531 A single glance at Plates LXI-LXXI allows one to realize that pyrography and engraving on calabashes do not obey such rigid stylistic rules as pottery. These calabashes differ very much, and there are scarcely any motifs that seem to be preferred to others. To what is this diversity due? I believe it artificial; and I am convinced that formerly this art followed precise norms, in a word, that in times past there was a true style of pyrography and engraving on wood. How would one explain otherwise that precisely the most beautiful pieces in my collection are at the same time the oldest and the most simila to the Andean prototypes (Plate LXI, 1 and 2; LXII, 1 and 2; LXIV, 2; LXVIII, 2 and 3, etc.)? Let us not forget that

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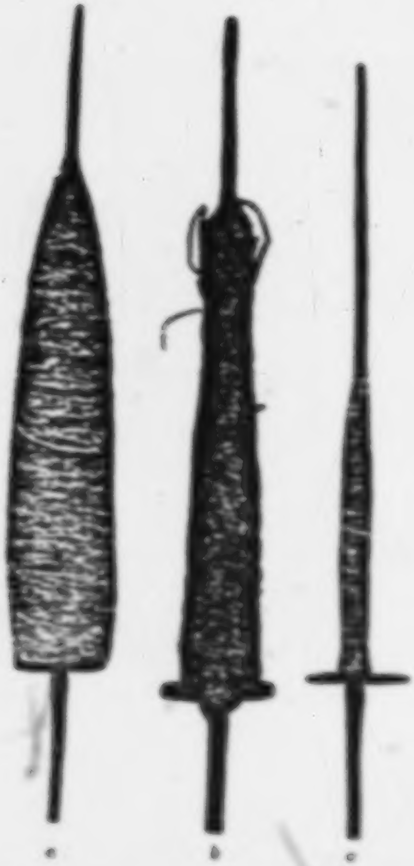

● [171] [184] Fig. 89. a, b, c. Chiriguano spindles of the bakaïri /Bacairi/ type. Prov.: a, Tasiti; b, Tintapaw; c, Tasiti (upper Pilcomayo). These spindles are provided with a groove in the upper part which allows the thread to be fastened. The whorls of a and b are of terra cotta, that of c of wood. (1/4 nat. size.)

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28 171 The Chiriguano have their loom in common with many tribes of tropical America, and they doubtless were already acquainted with it in Paraguay, at least in a more rudimentary form. In some Chiriguano villages looms of the Inca or Quichua /Quechua/ type, that is to say, horizontal ones, can be seen. The warp is then fastened to a small cord along a piece of wood and the cloth is rolled around as it is produced.

28 291 Headbands and belts are woven with looms of a type similar to the one just described. The warp threads are fastened to a loop of cotton attached to a hut post. As the fabric is made it is rolled around two small sticks or two ears of corn attached to the lower end of the warp (for this type of loom, see Nordenskiöld, 10, Fig. 4, p. 175).

29 & 30 I am reproducing in Fig. 90, a túmbi headband. These ornaments have now become very rare, and only a few old men still wear them. Our specimen is dyed with natural colors.

29 [198] [284] [439] [126] Every Indian woman who lives outside the influence of the missions still wears the tipoy, that is, a kind of long sheath which they fasten on the shoulder nowadays with a safety pin and formerly /Plate LXXII appears here/ /435/ with a thorn. In olden times these tipoy were woven by the Indian women on looms of the Arawak type. They were of cotton and dyed blue-black. /Fig. 90 appears here./ Today it is almost impossible to find a woman whose tipoy is not made of chamalote, a kind of cheap cotton cloth which the Syrians and half-breeds sell at a high price to our Indians. In the Caipipendí valley /Fig. 91 appears here/ I met two old women who still kept the tipoy of olden times. They would not give it up to me for any price. At Carurutí, an old fellow desirous of striking a good bargain sold me his wife's at a very /436/ high price in order to buy brandy for himself. It was very necessary to celebrate Easter fittingly.

[178] The shirts (tiru-humbae) which the men formerly sported exist no more except in the memory of the old men.

([See p. 278--Analyst)

Tupi-Guarani SL6
Tupinamba SO9
Guarani SM4
Chane' SF8

/436 cont./

000 animals or human beings. There is nothing like that among the
C 286 Chiriguano. The simplicity /437/ of their fabrics forms a striking
531 contrast with the richness and variety of the decoration of their
● 171 pottery. Their inferiority in this respect is far from corresponding
to the skillfulness which is their wont in all their activities. It is
C 286 enough to see the admirable pieces of work executed by little
174 Chiriguano girls in the missions to realize what they would have
857 been capable of if historic traditions had not held them away
from this art. Their distant Tupi-Guarani ancestors were
T-G 286 acquainted with only rudimentary forms of weaving, and it can
174 be asserted that /Fig. 95 appears here/ this industry remained
foreign to all the Tupi tribes which did not undergo the influence
T of a nation more civilized than they. The Tupinamba of the
286 Brazilian coast apparently practiced only the double-thread
174 technique (Doppelfadentechnick) by means of which they used
G to make their hammocks. The ancient chroniclers note the use
286 of the tipoy among the ancient Guarani of Paraguay, which is an
[175] indication of the existence of weaving among that subdivision
[291] of the Tupi family. Their present-day descendants, the Kainguá
/Caingua/, could pass for good weavers to judge by the fineness
G of the several fabrics which have been collected among them.
[291] These are for the most part wide belts which they pass between
their legs and knot around their loins. In reality, weaving is in
its beginnings among them, /438/ as is shown by their loom. It
is only a simple frame around which the warp threads are coiled.
The woof is passed through, thread after thread, as in darning.

C No doubt it was the Chané who taught the Chiriguano to weave,
Ce 286 and as they had probably not reached a /Fig. 96 appears here/
177 very high level in this art, they could only transmit to their
successors and suzerains, the Chiriguan, a still little-developed
technique, which the latter have scarcely improved on.

/438 cont./

323 The contrast between a highly evolved pottery and a still
286 rudimentary art of weaving is characteristic of the Indians
171 of the tropical and subtropical regions of South America, at
least for those who can pass for being relatively civilized,
such as the Arawak and the Karib /Carib/.

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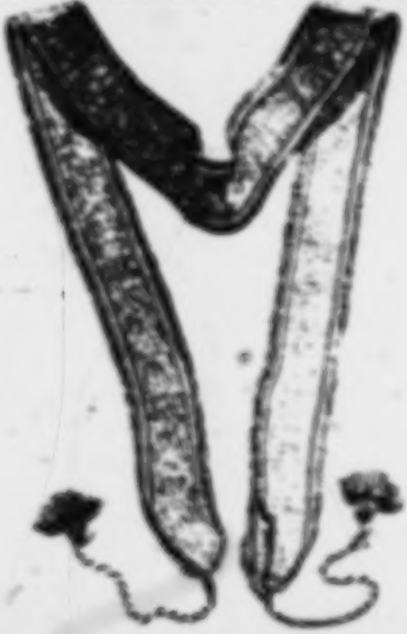

Fig. 95. Headband (*tsumbi*). Prov.: Yumbía. (1/5 nat. size.)

Chané SF8
Guarayu SF11

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Chapter IX

Basketry and Its Techniques

1. General Considerations

C Ce 285 [171] Basketry is far from being as abundantly represented among the Chiriguano and the Chané as among the Indian tribes of the Amazon basin or the Guianas. The secondary role it plays in their industry is due to the nature of the soil where they live and the climate they enjoy. C Ce 137 Palm trees with pinnate leaves are lacking, to my knowledge at least, over the whole extent of their territory; as for the ones whose leaves open like fans, if they are numerous in certain places, their occurrence is far from being uniform. The palms which the Chiriguano Indians call *karandaí* (*Copernicia australis*) form veritable groves here and there, whereas over vast regions they are lacking or appear only sparsely. I saw a con- Gu [285 482] siderable number of them between San Luis and the Saladito River, and I have crossed some large palm groves between Yacuiba and Villamontes, on the Pilcomayo, and south of the Parapití River, going C [824 137 285] from Cuevo to Pipi. I noted, moreover, that the distribution of the *karandaí* coincided with that of a certain type of basketry (*twilled work* /named in English/), for which the Indians use these leaves.

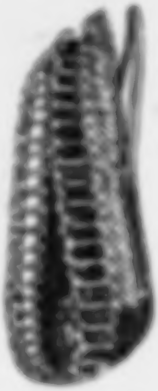

Fig. 97. Back basket used by the Guarayú Indians for transporting heavy loads (from Nordenskiöld).

Gu 285 482 Nordenskiöld (11, p. 169) recounts an anecdote which illustrates well the influence the environment exerts on this industry. At the time of one of his trips into the Chaco, the scholar was accompanied by several Guarayú Indians, who followed him as Gu [171] far as Chiriguano country. The Guarayú customarily load their baggage and the products of their fields into back baskets of a special type (see Fig. 97) which have a wide distribution in tropical America, from the Guianas to Paraguay (Nordenskiöld 11, p. 171 and MAP 21).

/439 cont./

p. 171 and Map 23). Their baskets being in bad shape, the Guarayú wanted to make some new ones and were very annoyed not to find in the region into which they had come the palm trees with pinnate leaves which they were in the habit of using for this purpose. Now, Guarayú and Chiriguano are brothers in race and language and emigrated at the same period from Paraguay to settle in the vicinity of the Andes. When leaving their country of origin, both were acquainted with this type of basket used by their ancestors, the Guarani, the Tupinamba of the Brazilian coast, /441/ and still favored among their first cousins from Paraguay, the Kaingua (Métraux, 7, p. 206). The disappearance of this cultural element among the Chiriguano is due solely to the lack of appropriate raw materials.

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In order to make up for the absence of back baskets, indispensable to a farming people /Fig. 98 appears here/ the Chiriguano borrowed from their neighbors in the Chaco, either the Mataco or the Choroti, the carrying nets (in Chiriguano: *allapoka*) whose use is so widespread among the latter and is so characteristic of their civilization. Carrying nets today are in general use among the Chiriguano, and in every village each family has at /Fig. 99 appears here/ least one (Figs. 98 and 99).

C [191]

In spite of this wide diffusion, the Chiriguano *allapoka* betrays its origin by its form and technique (see Figs. 100 and 101 /see pp. 282-283/), which are both found in the tribes we have just enumerated (Nordenskiöld, 8, p. 209, Technique I). Although considerably more advanced on the way to civilization than the seminomadic tribes of the Chaco, the Chiriguano do not by any means equal them /441/ in the art of making nets. The *allapoka* I collected cannot be compared with the deep bags which the Mataco or the Choroti, for example, make for the same purpose. In the village of Machareti, where Toba live with Chiriguano, it is the former who furnish the latter with the /Fig. 100 appears here/ carrying nets they need (see Fig. 99 /see p. 282/) (1).

C

171

1. Nordenskiöld (15, p. 163, Fig. 49 A) gives the detail of the technique of a Chiriguano carrying net. This technique is not found on any

[Text Continues on p. 283]

/441 cont./

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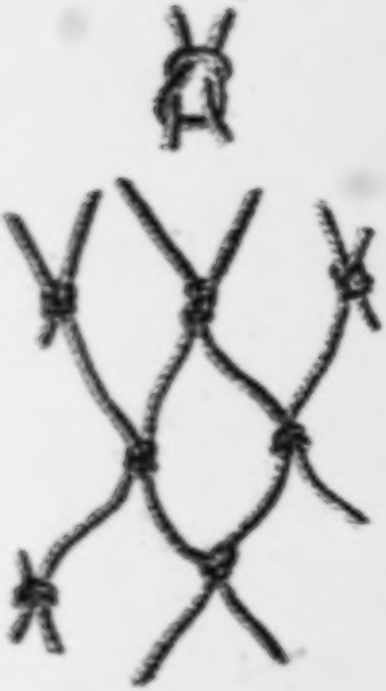

Fig. 100. Technique of the net of Fig. 98 (Technique I, according to Nordenskiöld, 9, p. 208).

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171 /fn. 1 cont./ of the añapoke I brought back from the Chaco. I suppose it is a question of a carrying net which the Chiriguano might have bought from Choroti, who, with the Ashluslay and the Matako, seem to be the only ones to use this technique. The technique we show in Fig. 101 is known to the Ashluslay, the Choroti, and the Tapiete. Nordenskiöld (9, p. 208) does not mention it among the Toba, where it nevertheless exists, as the añapoka of Fig. 99 testifies.

C /442 cont./ The basketwork of the
285 ancient Guarani or Tupinamba did not differ essentially in technique,
171 form, or processes of ornamentation from the basketwork
174 of the north of southern America (Métraux, 2, pp. 249-255). It must have offered more than one point of similarity with that of the Chané, and we must consider the modern basketwork of the Chiriguano the heir of the basketwork common to these two /443/ nations. Let us notice in passing that the basketwork of the populations of tropical America has a certain unity. Nevertheless,

C
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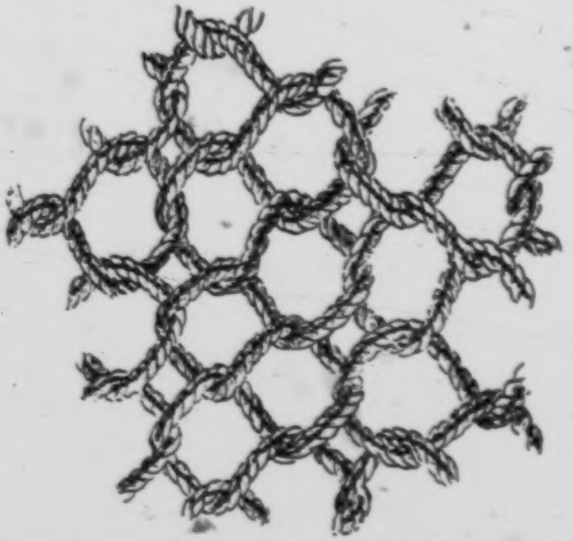

Fig. 101. Technique of the net of Fig. 99 (Technique V, according to Nordenskiöld, 9, p. 208).

C
285 it was in the Guianas that it reached perfection.
171
174 After their great migration to the foot of the Andes, the Chiriguano seem to have adopted basketwork of a new technique, which doubtless was unknown to their ancestors and racial brothers in Paraguay and Brazil. This technique is characteristic of all the baskets I am putting under the heading of wicker work /named in English/ in the following pages. As we shall see,
Ce
[285] this technique also exists in the Guianas, and it is possible that
[171] it was brought into the Bolivian Chaco by the Arawak nation
[174] of the Chané. The center of dispersion of the Arawak must be
000

Ce 101 174 /443 cont./ the center of dispersion of the Arawak must be placed to the north of the Amazon, and before the Chiriguano invasion the Arawak tribe of the Chané was established over the whole extent of the territory now occupied by the former.

C 285 171 Beside this technique another exists, known to the Chiriguano since time immemorial and well before their great migration. The English-language ethnographers give it the name of twilled work. No other type of basketwork is so widespread. This technique is preponderant in all of tropical America from the Antilles to Paraguay and in the south stops at the Chaco. The Chiriguano are the only Indians of the Chaco among whom twilled work is in current use. This type of basketry used to exist on the coast of ancient Peru, but its importance there was not great and it appears only in work baskets.

C 285 184 Basketry in wicker work and that in twined work do not have an identical distribution among the Chiriguano. Baskets of the first kind are numerous in the villages of the upper Pilcomayo (Saladito, Salado Grande and Chico, Ibopeytí, and Yumbia) and go as far as the Ivu mission. They stop, or are rare, in the rest of the Chiriguano country, notably in the Caipipendí valley, where baskets of the second type (twilled work) predominate almost exclusively. These are widespread there, and the beauty of their workmanship, the embellishments with which they are provided, put them well above the basketwork of any other zone and even above that of tribes living in regions richer in palm trees.

C [126] In the huts of the upper Pilcomayo I collected several baskets in twilled work, but they were rare there and often incomplete and torn. I had the impression that they had arrived there by way of commercial exchanges. In any case, the Indians no longer plait baskets of this type, and it is possible that their disappearance has given value to the specimens of them which remain. That would explain the absence of any new specimen and the preservation of ancient baskets almost beyond usefulness. Be that as it may, at present the true center of basketry in twilled work is the Caipipendí valley, and that of the basketry of /444/ wicker work, the region of the upper Pilcomayo. C [178] Since the living conditions of the Chiriguano in the missions north and south of the Pilcomayo have undergone deep modifications, I do not know what the respective

/444 cont./

285 184 distribution of these two techniques must have been in former times. We shall find this difficulty every time we consider the diffusion of a cultural element peculiar to these Indians.

285 177 Wicker work basketry has undergone strong European influence. The agents have been the half-breeds of the department of Tarija, who live in constant contact with the Chiriguano. This foreign influence on the baskets belonging to this technique is manifested by modifications of the original forms and improvements of details, such as horseshoe handles.

285 ● 171 Among the Chiriguano I did not find a single basket woven with the technique called "in spirals" (coiled basketry /named in English/), although in olden times it was in use among the Andean populations who used to and still do live in contact with the Chiriguano. Basketwork "in spirals" has continued on the altiplano, as the basket of Fig. 103, which I bought in La Quiaca, proves.

Basketry in "Wicker Work"

285 Mason (p. 228) designates under the name of wicker basketry a type obtained with the following technique: a rigid framework composed of thick, solid elements is intercrossed by thinner, more flexible elements. In the course of this work I shall call warp the rigid elements of the framework, and the ones crossing them, woof. The woof passes alternately over and under each element of the warp. This technique is well known to us: it is that of our wicker baskets, trunks, and back baskets (see Fig. 105 /see p.295 /).

Because of its very simplicity we have a right to suppose that this technique is old. It is only a variety of checker work /named in English/, the most elementary of all the techniques. By checker work we understand the process which consists of interlacing flexible bands so as to obtain a checkerboard design. The only piece of basketry made with this technique that I know of in the region we are concerned with is a basket that Eric von Rosen

/444 cont./

285 (1, Fig. 134, p. 122) obtained from some Choroti who were [114] camping near Tatarenda. I share the opinion of this explorer, who considers this object as of Chiriguano origin.

In spite of its simple and archaic character, basketry in [171] wicker work is rare in South America. According to Nordenskiöld (10, p. 171, and 11, p. 198), it is found among the Araucan, Yurakare, Atsawaka, Tambopata Guarayú (Chama), Yamiaka, and the Indians of Guiana, in particular those of the Roroima region.

1: Métraux--289 E-5 (1929) 1930 SF10 Chiriguano SF10

/445/

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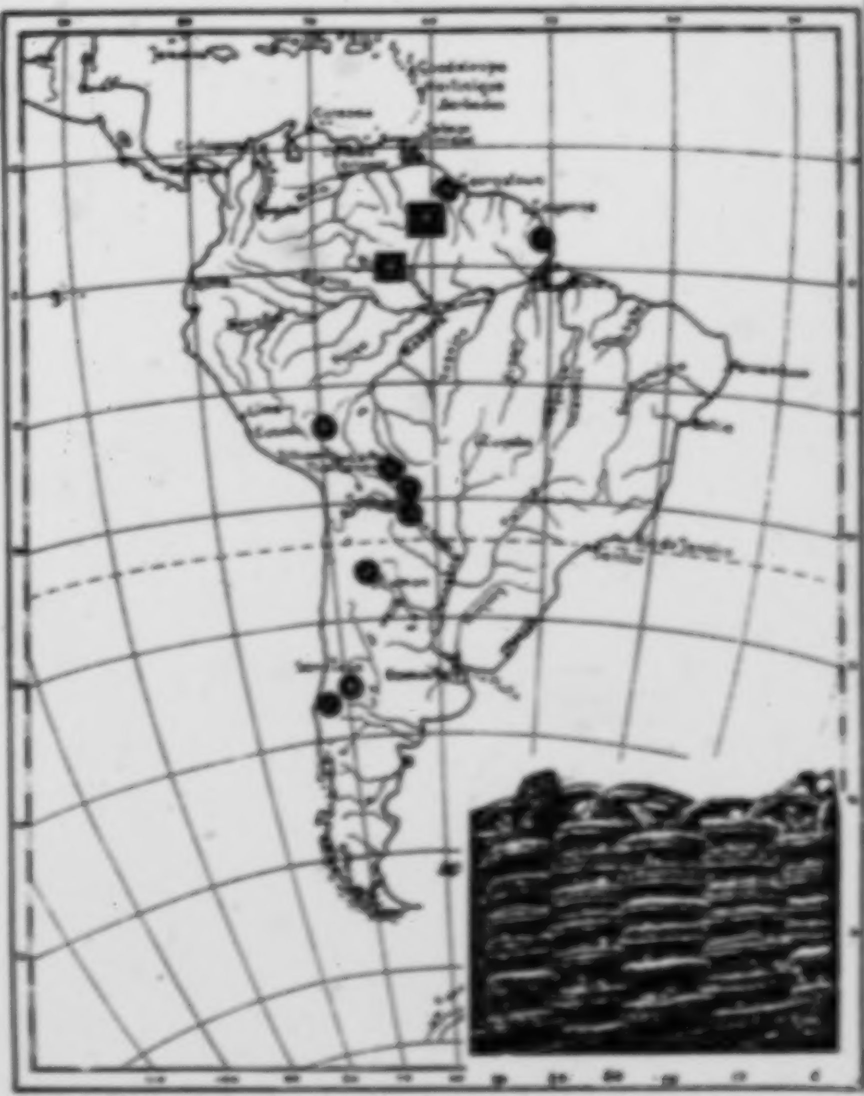

Map 1. showing the distribution of the technique called wicker work

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Table for Map 1

Distribution of the basketry technique called "wicker work"

Numbers on the map	Tribes	Authors	Remarks
1	Chiriguano and Chané		
2	Diaguite	Museo de Tucumán No. 305	Some impressions on the base of a vessel enabled me to discover the existence of this technique in this geographical area.
3	Araucan of Chile	Latcham, p. XXXV (1)	
4	Araucan of Argentina	National Museum of Buenos Aires (Palavecino Collection).	
5	Yurakare	Nordenskiöld, 11, Fig. 30, p. 128.	
6	Atsawaka, Tambopata-Guarayú	Nordenskiöld, 11, p. 198.	
7	Palikur	Nimuendajú, Fig. 23, p. 49.	
8	Siusí and Kauá of the Aiary River	Koch-Grünberg, 2, Vol. II, Fig. 142 a-d, p. 221.	
9	Patamona, Makusi, Arekuna	Roth, p. 140, Pl. 105 B and C.	
10	Arawak	Roth, Pl. 104 B.	

[113]

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1. Latcham, R. E., "Ethnology of the Araucanos," in The Journal of the Royal Anthropological Institute of Great Britain and Ireland, Vol. 34, London, 1904, cited from Nordenskiöld, 10, p. 171.

/446 cont./

285 171 This information needs to be completed. The technique called wicker work was apparently known to the ancient Diaguite. A vessel from one of the Andean valleys in Tucuman province bears imprinted on its base impressions left by a tray or basket in wicker work, upon which the potter had placed this receptacle when the clay was still soft (Fig. 102). This discovery did not surprise me: already, and for a long time, I had supposed that this manner of plaiting baskets was not foreign to the peoples of the Andes. How otherwise could one explain the occurrence of wicker work among the half-breeds and Indians of Tarija department, the Araucan and Chiriguano Indians of the upper Pilcomayo?

Guiana forms a second area of dispersion of this technique without, however, its being very common there. The small bags in which the Patamona put the cotton with which they provide the arrows of their /447/ blowguns before blowing them are in wicker work, the same as the pegalls with the so-called "armadillo" motifs of the Arawak, Patamona, and Makuši /Macusi/. The baskets in the form of carafes or bottles of the Siusí /Siusi/ and Kauá /Caua/ of the Aiary River are also good examples of this technique. (On the modalities and distribution of this technique, see Roth, p. 140 and Plates 104, 105, and 106, and pp. 329-331.)

The distribution of this technique is wider in North America. It is known to the Indians of eastern Canada and abounds in /Fig. 102 appears here/ southern Mexico and in Central America. It appears scattered here and there on the Pacific Coast and in the interior basin.

Most of the fish weirs, the enclosures for stopping game during hunting drives, and the coarse baskets serving for the transport of numerous objects are made in this technique.

285 323 If one examines the baskets of this type among the Chiriguano, one will doubtless be struck by the fact that several of them assume the form of pottery pieces. This resemblance is further accentuated by the fact that some (see Plate LXXV, 2 /see p. 299/) are provided with lateral handles in imitation of vessels. The interplay between these two industries is evident.

/448/

285 171 172 The horseshoe handles which surmount some of these baskets (Plate LXXV, 1 and 3)[A] seem to me to come from imitation of European or half-breed basketwork. Among the half-breeds of the eastern slopes of the Andes I found baskets which had exact replicas among the Chiriguano (see, for example, Fig. 108 /see p. 302 /) and attested eloquently to the borrowing of the latter.

285 171

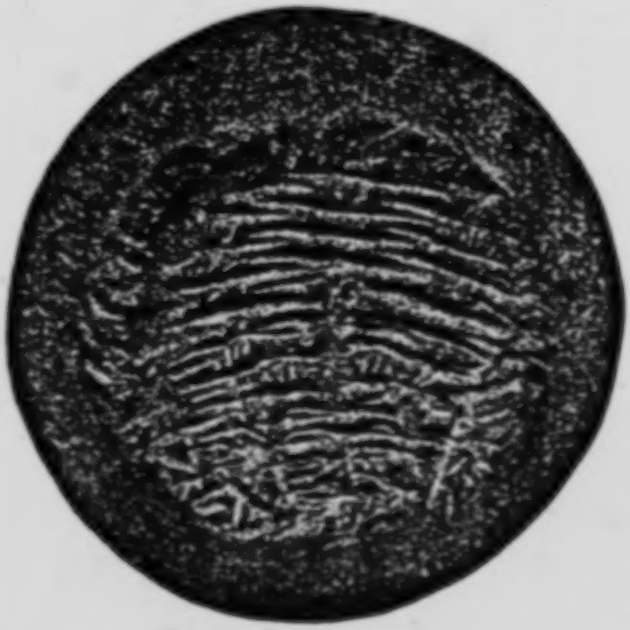

Fig. 102. Base of a vessel from the mountainous region of Tucumán Province, and bearing the impressions of a tray or basket in wicker work, on which it rested during its manufacture.

Besides, the Chiriguano give the Spanish name of canastos to baskets of European form /Fig. 103 appears here./

Among the baskets in wicker work there are some (Plate LXXV, 4) which in form and technique are singularly reminiscent of the baskets of Brazilian Guiana which Koch-Grünberg (?, Vol. II, p. 221, Fig. 242 a, b, c) compares to carafes. (Cf. also Roth, Plate 104, Fig. C.)

[A] [See p. 299--Analyst]

/452 cont./

285 This small basket is closely related to the preceding one in its technique. The warp is made of four fibrous bands which cross in octagons and are then divided into three /Plate LXXVII appears here/ /453/ or two diverging elements which form the warp (see Fig. 106 /see p. 301/).

Figure 108. Height, 12 centimeters; maximum diameter, 28 centimeters. Provenance: Ivu.

[199] There is no doubt that this basket is a pure and simple imitation of European ones. I have seen baskets identical from the point of view of form and technique among the half-breeds of the department of Tarija.

3. Basketry in "Twilled Work"

The term twilled work designates the basketry technique in which the woof elements pass over two or several elements of the warp so as to produce with the contexture of the fabric diagonal motifs and an infinity of others all based on the changes of rhythm in the number of the warp elements which have been skipped over (Mason, p. 224).

285 191 In the pages where I dealt with wicker work I have already had occasion to note the affinities which not only the technique but coin the form of Chiriguano baskets offer with those from Guiana. The analogy is still more striking with twilled baskets. We have among the Chiriguano the exact counterpart of the famous telescope baskets or pegall of Guiana. These are rectangular baskets in two parts, one fitting into the other and shutting hermetically (Plates LXXVIII, LXXX,[a] and Figs. 110 and 111). Nordenskiöld (10, p. 173) has given us a map indicating the distribution of baskets provided with a cover into which they fit more or less completely. These "telescope" baskets are particularly abundant north of the Amazon. I suspect that the famous karameno of the Tupinamba, in which the latter put their feathers, must have belonged to this type. Among the Tupi-Guarani, the only ones where this type of closure has been noted are the Guarayú, Pauserna, Mauhé /Maue/, and Oyampi (Métraux, 2, p. 253).

[a] [See pp 309 & 309 respectively -- Analyst]

/453 cont./

285 [531] [171] Another point of contact between the basketry of the Chiriguano and that of the Indians of the east and north of South America is the occurrence of baskets in twilled work in which elements of two colors are combined, following a changing rhythm, to produce geometric figures. The basket of Plate LXXVIII, with the frets standing out in black on the sides, is representative of this form of art, which, in the Guianas, shone with a lively brilliance.

Baskets of the pegall or "telescope" type are divided into two categories according to the principle of their plaiting. To make one kind (Plate LXXIX and Fig. 111), the basket-maker began by crossing the warp elements with one another in such a way that they radiate from a single center. Then he interlaced according to a binary rhythm the tigellas which /454/ left the common center like so many rays. Baskets of the second category have been plaited by intermingling the elements of the warp and woof at right angles so as to make the bottom without any precise point from which the elements come away (Plate LXXX, 2). The photographs (Plates LXXIX and LXXX, 2) show what I mean better than any description.

[824] The stalks which serve for the fabrication of baskets in twilled work are taken from the leaves of the karandaí palm (Copernicia cerifera Mart. or Copernicia australis). The leaves are cut into fine strips and softened by immersion.

Sieves and fire fans belong in the basketry called twilled, but I shall deal with them in a separate chapter.

Description of baskets in "twilled work"

Plate LXXVIII, Figures 1 and 2. Height, 7 centimeters; diameter, 17.5 centimeters. Provenance: Caipipendí.

This basket belongs to the category of those called "telescopes" or /Fig. 110 appears here/ pegall of Guiana. Plate LXXIX which shows us the detail of its upper surface also indicates its technique with sufficient clarity so that no diagram is necessary. The warp is composed of 32 flexible elements radiating from a common center. They begin by interlacing for two rounds; then,

[See P. 308 -- Analyst]

1: Métraux--314 E-5 (1929) 1930 SF10 Chiriguano SF10
Guiana SR1

/457 cont./

C 415 285 Sieves are of two kinds. The first category includes those whose meshes are close together and composed of fine strips of karandaí leaves intercrossing in a binary rhythm. Sieves of this type belong in the basketwork called twilled. The Chiriguano give them the name of urumpé and use them in preference to the others, whose usage is limited.

The second category includes sieves with wide meshes. The strips forming them cross in checkerwork, that is, the woof passes alternately under, then over, an element of the warp. The Chiriguano designate sieves of this type by the name of urumpesa, and they use them for sifting ground corn when they wish to obtain a coarse flour.

C G 415 295 191 Some of these sieves are real works of art, but they cannot be compared with the magnificent specimens from Guiana, on which the alternation of the black and white elements produce geometric figures of the handsomest effect. It is probable that formerly the Chiriguano had identical sieves, as can be supposed from the one on Plate LXXXII, which is composed of a warp and a woof whose gray and white elements are arranged in such a way as to form dark and light bands on which concentric squares stand out.

C 415 191 The sieve is widespread in all of tropical America, where it is used not only for corn flour but also for that which the natives make from bitter manioc. It is unknown to the primitive populations of the Chaco, who have not even felt the need to borrow it from the Chiriguano or Chané. The populations of the Inca Empire /458/ did not know its use. The urumpé is a utensil common to nearly all the Tupi-Guarani tribes; it has been described or noted among the Tupinamba, the Guarani, the Kainguá /Caingua/, the Guarayú, the Pauserna, the Apiaká /Apiaca/, and the Parintintin. The Chiriguano must therefore have taken along with them when they emigrated from Paraguay, which does not exclude the fact that they may also have found it in use among the Chané. C [194]

Guiana SR1

/460 cont./

Fans or Fire-blowers

C 372 184 [171] Great was my surprise when upon arriving in the Chiriguano villages of the upper Pilcomayo region I found fire fans identical with those of the Indians of Brazil and the Guianas. Nordenskiöld (10, p. 56) barely mentions them and insists on their rarity. The fact is explained by the absence of this cultural element in all the rest of the zone inhabited by the Chiriguano. In most of the villages they use old hats or fragments of baskets to fan the fire.

C 372 285 Plate LXXXV.$^{2}_{1}$ Length, 28.5 centimeters; width, 31 centimeters. Provenance: Saladito.

The making of these fans is rather simple. The leaves composing them cross in a rhythm of two. On the edge the stalks have been bent back and, passing again across the fabric, are interlaced to form a pucker on each side. The free ends /Plates LXXXIII-LXXXV appear here/ /461/ have been plaited on top and one part passed into a split stick forming the handle (Fig. 117).

C [171] C [824] An important remark must be made on the subject of these fans. They /Fig. 117 appears here/ differ little from the fans made of a single pinnate palm leaf, such as are found in Brazil and Paraguay. The Chiriguano, having no palm trees of this species in their new homeland, had to /Fig. 118 appears here/ adopt the palmate leaves of the karandaí. They replaced the petiole, which forms the handle, with the split stick to which I have alluded. (Max Schmidt, 2, Figs. 106 and 107, pp. 219-220.)

C 285 353 797 [824] /462/

"Flowers"

On feast days the Chiriguano of the Franciscan missions decorate the church with artificial "flowers" which they make from leaves of karandaí palms. These decorations are of ancient origin and derive directly from the straw amusements /jeux/ still made by the Indians in various /Fig. 119 appears here/ regions of America, notably in the Guianas. The natives of the G 285 353 latter region often hang them in their houses where they perhaps

$^{2}_{1}$[See p. 322--Analyst]

[Text continues on p. 324]

1: Métraux--324 E-5 (1923) 1930 SF10 Chiriguano SF10
Guiana SR1
Choroti SK6
Ashluslay SK5

G
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353

/462 cont /

serve as amulets, and, in any case, as ornaments. (Roth, pp. 497-499, Figs. 241-244 and p. 270; Koch-Grünberg, 2, Vol. II, p. 244.) In the same way the Chiriguano Indians decorate their huts with these figures, which they take care to have blessed. Exactly as in Europe they keep palm branches as lucky charms. Rosen (1, p. 61, Fig. 51) publishes a similar straw amusement which he found among the Choroti and which was pointed out to him as an ornament worn on the forehead. This explorer suspects the exactitude of this information and supposes that a ritual object is concerned. In reality, it is only a "flower," which the Choroti described by Rosen probably received or bought in some Chiriguano mission. It is enough to compare the figure of it that he gives us and ours in order to be convinced of this.

C
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778
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Ci
114
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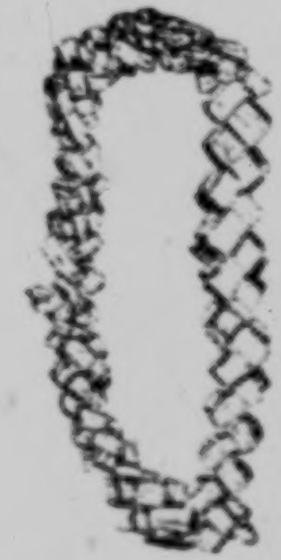
301



A
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Fig. 119. Wreath of plaited palm leaves (amusement or ornament?). Ashluslay. Prov.: Estero Patiño. (1/4 nat. size.)

A
C
Ci
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171

Figures made of palm leaves are not, however, unknown to the other Indians of the Chaco. The Ashluslay sold me a diadem braided according to this principle (Fig. 119) and Rosen (1, Fig. 44, p. 48) reproduces an identical head-ornament which he bought from a Choroti tribe.

/464 cont./

796	Eyu ickuama	Come and kiss me
832	Šemireko mi	My little wife
786	Diyuru emesie	Give me thy mouth
539	Tuiña dipota	I love thee much
	Še songo pe	With my heart
	Ime deresa ikavi	Thou hast pretty eyes
	Ime diyuro misiray	Thou hast a little mouth
	Tuiña dipota	I love thee much
	Pairamo ayporu deve.	For that I am going to ask for thee.

796 532 522 During this time young or old men with their faces covered by a mask (añawasu) run here and there, force the people to dance by blows of a stick, play tricks on them, and address jokes to them.

796 [293] The feast lasts as long as there is kãwi or alcohol. At the moment when it is on the point of ending, a final ceremony takes place. The rite of going out is similar to the rite of entering: the couple who planted the flowery stick tear it from the ground and go out of the village, followed by the añawasu and all those who took part in the festival. The procession advances to a certain distance from the village to the sound of the flutes and drums. They throw away the masks and throw stones while shouting. The carnival is finished and everyone goes home. [585] Some take along their new wife, for it is at this moment that most marriages are celebrated.

796 177 178 [241] The carnival festivity such as I have just described involves only a few elements borrowed from the half-breeds or creoles, outside of the coincidence of dates. This is an ancient feast of a purely agricultural character, which the Chiriguano have acquired the habit of celebrating at the same time as the Bolivian carnival. Besides, the Indians of Ibopeytí are pagans.

796 241 171 The masked men are supposed to represent the spirits of the dead, as their name indicates (añat spirit wasu great). As in the festivals of the Guianas and Central America, they come in numbers /Plate LXXXVI appears here/ /465/ to insure for their

[TEXT CONTINUES ON P 329]

Chané SF8
Arawakan Indians SR6

C /465 cont./
796 descendants or relatives the fertility of the fields and the
241 abundance of the future harvest. These masked festivals have
[771] their counterpart in the famous ceremonies of the populations of
C the Negro River, the details of which Koch-Grünberg has made
[177] known to us. Besides, it is probable that the Chiriguano
borrowed these ceremonies, and especially the masks, from the
A Chané. It is the racial brothers of the Chané, the Arawak of
796 the Negro River, who celebrate these festivals with the most
241 splendor. The Chané of the Parapití still accord to these ancient
C rites more importance than the Chiriguano, and their masks
796 crowned with immense tufts of feathers are, it appears, more
241 sumptuous than those of their old Guarani enemies.
532

In the missions the carnival has lost its purely pagan
C significance and has become contaminated with usages which
796 the Chiriguano have borrowed from the half-breeds. Nino
[777] (pp. 267-270) gives a good description of them, of which I
[177] shall summarize the principal features.

C The festival is directed by a personage wearing an old-
[532] man mask. He stops at each corner of the square, recommending
peace and harmony to all.

Then they give themselves over to different games: masked personages scatter bean pods or corn bran upon the dancers.

Young men, masked but almost entirely naked, daub
C themselves with mud and try to soil all those who have new
[177] garments. These two customs can have only a Bolivian origin.

Individuals who are also masked mimic a combat between
C
796 a jaguar and a bull which is finally put to death by a fanciful
535 butcher. Then they pass on to the pleasures of the dance. "The
[536] dancers form a large circle by joining hands and dance thus
three times. Three times also they squat down, and three more times they pass under the extended arms of a couple of the same circle, and finally the same number of times they press against one another, forming a big mass, their faces turned toward the outside and their hands folded. They remain in this position until another couple dances around them. These do not hold each other by the hand. The man chases the woman and tries to grab her. She avoids him and goes to hide in the middle of the others."

/488 cont./

forming a design. Combs of this category generally have a double row of teeth, but sometimes one row is entirely covered by the plaiting and is transformed into a handle (Nordenskiöld, 7, Fig. 108, p. 204). [302] These two kinds of comb are also found in the Andean zone; but whereas the first is limited to this geographical area and especially to northwestern Argentina, the second, which includes all varieties of composite combs, has a vast distribution

[59]

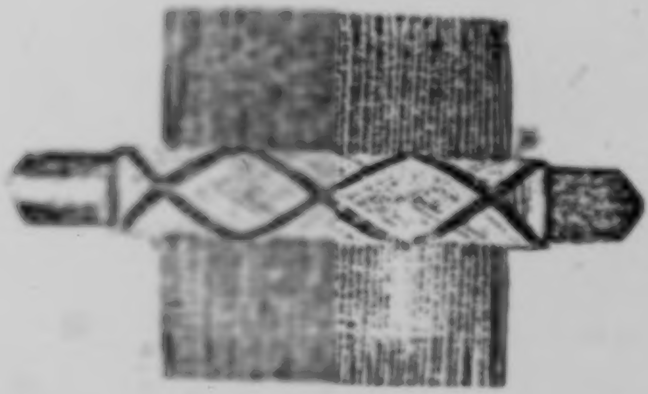

Fig. 175. Composite comb made of fine cylinders of bamboo. Chiriguano. Prov.: Caraparí. (1/3 nat. size.)

over all South America, in the Inca Empire as well as in Brazil. The Chiriguano doubtless used them well before they settled in their present location. It is not the same with the comb of carved wood, which they borrowed from the Chicha or the Humahuaca. With regard to two combs in my collections, one (Plate LXXXVII, 14) has a handle carved in the shape of a dog, and the other, a deer (Plate LXXXVII, 15). They strongly resemble a comb found in the Quebrada de Humahuaca, which is also surmounted by the silhouette of a quadruped (Debenedetti, 2, p. 247, Fig. 186). At Kipon in the Calchaquí Valley Debenedetti (1, p. 27, Fig. 16) discovered a comb whose upper part represents a human head, in which our author thinks he sees an idol with a sad expression (!?). The half-breed women of that valley have kept up to our times the ancient indigenous combs of algarroba wood.

/468 cont./

412 At La Paya, Ambrosetti (6, Fig. 254, p. 484) discovered
171 combs cut out of a small wooden board and some composite combs. Instead of simply recording the coexistence of two different types of combs /Plate LXXXVII appears here/ /469/ in the same place, a very natural phenomenon by reason of the heterogeneous character of the culture of La Paya. Ambrosetti puts forth the strange hypothesis that these combs served for carding wool, without taking the trouble to inquire whether this instrument was known in pre-Columbian times.

303
322 The making of combs, like all wood carving, is an essentially masculine job.

462
412 The table on Plate LXXXVII indicates my idea of the morphological evolution of the different forms of combs which
412
174 I have collected.

Chapter XII

Furniture

352
[114] Since the diverse cultural elements which constitute the furniture of the Chiriguano have been completely studied by Nordenskiöld (10, pp. 8-22), I shall limit myself to mentioning them here, insisting only on several details. /Fig. 124 appears here./ /See p. 338./

[342] Let us enter a Chiriguano hut. The door we open is a kind of screen of reeds or a cowhide hardened in the sun. Daylight penetrates the interior through this opening. The only important
[513] piece of furniture is a wooden cot (Fig. 125), a kind of bedstead generally occupied by two persons between whom one or two children come /470/ to slip in somehow or other. Nor do the Chiriguano hesitate to sleep on the ground on an oxhide, which they spread out in front of their house. On the upper Pilcomayo, in nearly all the huts one can /Fig. 125 appears here/ /See p. 339./ see one or two hammocks which serve either as seats during the day
[286]
[177] or as cradles for small children. Their technique, that of the double thread (*Doppelfadentechnik*), continues an old Guarani

[Text Continues on P.338]

/474 com./

524 already allows us to establish some very curious facts. Thus among the string figures I have brought together, three are exactly like
● 171 figures from various tribes of the upper Negro River and the Guianas. The first is the one the Chiriguano call "full moon" (yasiwasu) (Plate LXXXIX, 3) and we find it again among the Siusí of the Aiary River under the name of "tapir intestines" (Koch-Grünberg, ?

291
524

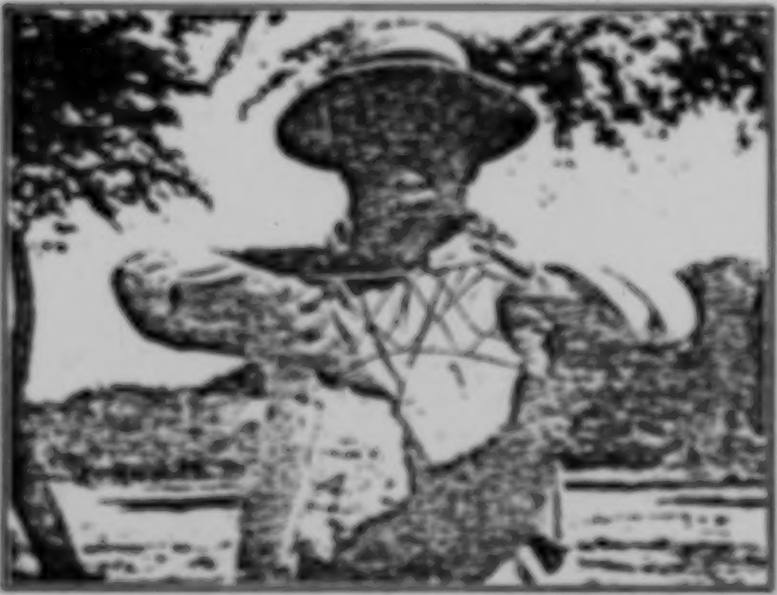

Fig. 125. Indian executing the string figure called "snake design" (mboi-kwatía). Caraparí. (Photo A.M.)

524 Vol. I, Fig. 69 c, p. 122), among the Tukano /Tucano/ designated
171 as being a "tapir with its four feet," and among the Betoya simply as "a tapir" (id., Vol. I, p. 252, and Vol. II, Fig. 72, p. 131).

Our "star" (yasi-tata) (Plate LXXXIX, 1) is interpreted as a "spider" by the Siusí (id., Vol. I, Fig. 69 g, p. 122) and the Kobeua (id., Fig. 73, p. 131), but the Wapisiana /Wapishana/ see a "star" in this figure, exactly like the Chiriguano (cf. Roth, Fig. 267, p. 513).

/474 cont./

524 171 The "snake design" (*mboi kwatía*) (Plate XC, Fig. 7) have their equivalents among the Akawoi, Arawak, Wapisiana, and Patamona (Roth, Fig. 293, Fig. 326), but represent, according to these Indians "four fish walking" (*sic*). In his book on the Indians of the Chaco, /Plates LXXXIX and XC appear here/ /475/ Nordenskiöld (1, Fig. 25, p. 71) gives the photograph of a Choroti child who has just executed a *cat-craddle* identical with our "snake design." It is regrettable that Nordenskiöld has not given its meaning.

524 The string figure on Plate XC,[a] 2 represents the mark borne by the woolen blankets (*jergón*) the creoles put under their saddles. There is no doubt that the indigenous meaning of this figure has been forgotten and replaced by a new appellation. This is probably what has happened also to the *cat-craddle* (Fig. 136) named *culo de caballo* /*horse's rear end*/. /Fig. 136 appears here./ /See p.350./

String figures can be subdivided into two categories, the first including all those which form a stable figure like a design, and the second those which represent an object, animal, or organ by synthesizing its characteristic movement.

Thus the string figures on Plates LXXXIX-XC belong to the first class, but the one which the Indian on Figure 136 is in the act of executing belongs to the second. The latter *cat-craddle* consists in opening or closing a small circle of string which is supposed to represent the contractions of a horse's anus.

524 171 Among the Siusí there are also mobile string figures which symbolize an animal by imitating its typical movements (the "caterpillar," for example) exactly as among the Chiriguano.

524 171 199 The resemblances between the Chiriguano string figures and those of the /476/ Guianan tribes could be explained by Arawak influence, and we could suppose that the Chané kept the figures common to the whole family. String figures travel very rapidly and only their meaning changes. Therefore it is possible that the Chiriguano were acquainted with them before being in contact with the Arawak.

[a] [See P. 349-- Analyst]

/677 cont./

000 193 182 172 115 532 laughter: Aikuaá "I can't do it, I don't know how." Only one, a girl, Iwawasi, allowed herself to be persuaded by the promise of a spool of thread. Her awkwardness was not feigned, as I was able to see from the beginning, seeing the embarrassed air with which she took the pencil. Once ready to draw, inspiration was suddenly lacking. She stopped short until I had pointed out a vessel to her to copy. Since her confusion only grew greater, she asked Comito, the small boy who made my first drawings, to help her. He drew the vessel on Plate XCIII, 10, which she began conscientiously to reproduce in series. I protested, and then she made me a horse and on this horse's back a man and a child, then a woman (Plate XCI, 3 and XCIII, 7). I am not very sure that all the drawings she told me she had made were hers, for when my attention was diverted by a visit, she had Comito secretly help her.

532 171 The drawings the Chiriguano executed for my sake recall not only those of our children but approximate appreciably those which have been collected in various regions of South America, notably among the tribes of the Negro River (Koch-Grünberg, 1); the Taulipang and the Makuši (Koch-Grünberg, 2, Plates 26-32, pp. 150-161); the Indians of the upper Xingú (Steinen, 2, Plates III-IV), (Max Schmidt, 2, Figs. 245-247, pp. 396-399); the Choroti and the Ashluslay (Nordenskiöld, 2, Figs. 63-66, pp. 130-132); the Kainguá (Ambrosetti, 2, Plates I-III, pp. 674-682), etc.

There could be no question of making a comparative study of these drawings, so uniform is their style. The only details which are worth being brought together are those denoting similar psychological characteristics and yet these common traits are not characteristic of a primitive mentality. I should scarcely have to point out the fact that in drawing a woman, a Kainguá Indian proceeded exactly as did two of my Chiriguano artists (Plate XCI, 3 and 7): he began by representing the woman naked, then dressed her.

/482 cont./
302 faces and legs oiled in this way, which gives them a very
strange reddish and shiny hue. This custom, which was already
● [191] noted /483/ in the sixteenth century among the Tupinamba of
[198] the Brazilian coast, is tending to fall into disuse.

Roucou in paste form is kept in a small corn-husk bag (Fig.
302 139). /Fig. 139 appears here/ as is *kalasapa*, a substance com-
386 posed of a mixture of roucou and pounded *aroma* seeds, which
[415] gives a violet color.

757 4. Jaguar fat (*yaguapira*) cures any "leprosy" (*karatši*) if
237 one rubs oneself with it after heating it.

5. Iguana fat makes cramps go away and heals wounds.
[752] Its use is external.

6. The dried penis of a fox makes toothaches and earaches
go away. For that it suffices to touch the ailing part with the
end /Fig. 140 appears here/ of this member. The Indians
consider it very malodorous and touch it only with repugnance.
[415] To avoid this inconvenience they provide it with a handle and
shut it up in a bamboo case (Fig. 141).

7. Deerhorns heated and /Fig. 141 appears here/ applied
against the neck will cure a stiff neck. The medical use of
[172] deer (*wasu*) horns explains the frequent presence of the horns
of this animal in the archeological strata of the neighboring
Andean regions. Some have thus been found in the ruins of
the Alfarcito, in the Quebrada de Humahuaca (Debenedetti,
4, p. 21), at Tilcara (Debenedetti, 2, p. 232), at La Paya
(Ambrosetti, 6, Fig. 235, p. 453), and at Tastil (Boman, 2,
Vol. I, Plate XXIX, Fig. 78 *f*).

858 Horns adhering to a fragment of the skull and whose use
304 could only have been magical or medical must be distinguished
237 from the ones which the Indians work into awls. These in-
412 struments still have a ritual use and are reserved for piercing
the lower lip of children when they are old enough to wear the
labret. At least this is what Campana (p. 80) informs us. Besides, the Indians all have confirmed this detail to me.
[171] Formerly, the Tupinamba of Brazil practiced this operation with
an awl of the same nature (see Métraux, 3, p. 105).

/484/

412 However, these awls are too abundant in each village for their use to be only sacred. It is probable that the Chiriguano use them as a simple tool for solely secular purposes.

[174] At Tilcara, Debenedetti (2, Fig. 176, p. 232) discovered specimens made of deerhorn identical with our Chiriguano examples.

824
757 8. I have in my collections seeds whose virtues are multiple: they are an excellent remedy for skin eruptions, ulcers, and toothaches.

9. For stomach-ache the Chiriguano recommend the absorption of particles of wood (mboipinda).

232
[824] 10. Certain seeds (of a graminaceous plant?) when crushed give a paste or powder with which they treat animals whose sores are attacked by worms.

11. When cows' hooves tend to work loose, they bathe them with fragments of limestone (itakwi).

757
237 12. Fat extracted from a cow's foot is an effective ointment for cases of rheumatism.

13. The beak of the toucan is said to enjoy great medicinal properties. They grate it and drink in water the powder which comes from it (Campana, 111).

Stitches in the side and dysentery are treated with a piece of armadillo shell burned, ground, and dissolved in water, which the patient drinks.

757
[114] In the Diccionario Chiriguano-Español y Español-Chiriguano etc. (passim) and Nino's book (pp. 288-290) is found many a very interesting piece of information on the pharmacopoeia of the Chiriguano. I shall summarize them in order to complete my own observations.

757
164 1. The oil which floats on kãwi, when it is done, is a good remedy for headaches.

2. Salt, ground and drunk mixed with the urine of a small child, quiets stomach pains.

[824] 3. Rheumatism is doctored by applying on the ailing part a branch of ulala (ñankawina) from which the thorns have been removed and which has been heated.

/488 cont./

757 The explorer Eric von Rosen tried to demonstrate that
114 some objects found in northwestern Argentina are clyster tubes
or nozzles. Nordenskiöld is also of this opinion. As for me,
I am all the more tempted to adopt this hypothesis because I
could not otherwise explain the presence of this instrument
757 among the Chiriguano. No Tupi tribe, as a matter of fact,
171 with the exception of the Omagua on the upper Amazon,
174 seems to have resorted to enemas in case of illness; at least
not one of the numerous travelers who gave their attention
to these Indians mentions the operation among them. There
is no doubt that the Chiriguano borrowed this curative method
and the corresponding instrument from the nearby Andean
peoples. We know that the Quichua /Quechua/ gave each
other enemas, as is proved by the discovery of a leather syringe
in a pre-Hispanic grave of the Ollachea Valley in eastern Peru
(Nordenskiöld, 14, Fig. 74, p. 188). (To be continued.)

000 /The bibliography, pp. 488-493, is omitted in the translation; see the foreign text. The following "Table of Contents" appears at the end of this volume of the Revista, along with the tables of contents for the other articles in the volume. The lists of plates and figures which follow the table of contents in the translation were made up from the captions and are not part of the original text./

/598/

Studies on the Culture of the Chiriguano Indians

by Alfred Métraux

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Cooking 97

2:Métraux E-5 (1929) 1948 SF10 Chiriguano SF10 ●

Chane SF8

C Ce 226

Fishing.—Fishing is worth while only for those *Chiriguano* and *Chané* who live along the upper Pilcomayo or Bermejo Rivers and, to lesser extent, for the *Chané* of the Parapeti and Itiyuro Rivers. Methods of fishing vary somewhat with the regions. Along the Pilcomayo River, fish are caught with iron hooks, with dipnets, similar to those of the Chaco Indians, with the bow and arrow, and with long two-pronged spears. Fishing baskets are used in combination with stone dams (fig. 57).

C Ce [171]

C 226

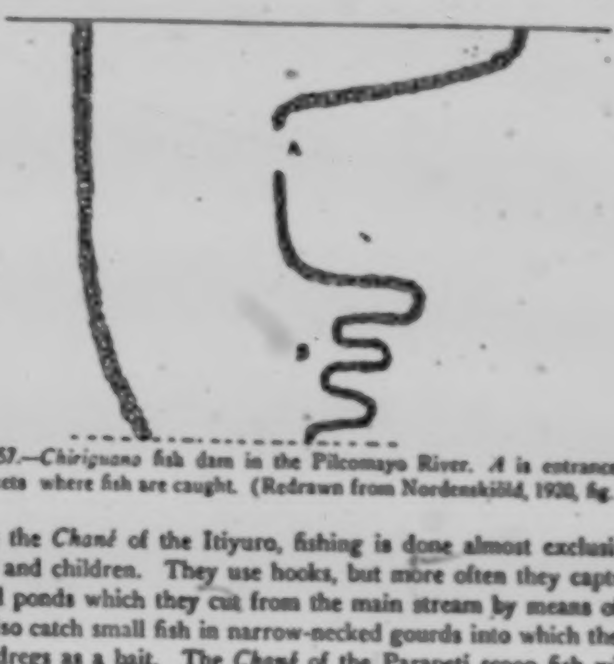


FIGURE 57.—*Chiriguano* fish dam in the Pilcomayo River. *A* is entrance; *B* are pockets where fish are caught. (Redrawn from Nordenskiöld, 1920, fig. 14.)

Among the *Chané* of the Itiyuro, fishing is done almost exclusively by women and children. They use hooks, but more often they capture fish in small ponds which they cut from the main stream by means of weirs. They also catch small fish in narrow-necked gourds into which they place chicha dregs as a bait. The *Chané* of the Parapeti scoop fish with nets or shoot them with arrows tipped with a bundle of cactus thorns (Nordenskiöld, 1912, pp. 184–185).

Ce 226 [462]

C 231

Domesticated animals.—Modern *Chiriguano* raise sheep, cattle, horses, and chickens. Their dogs are so completely mongrel that their European or Indian origin cannot be ascertained. The *Chiriguano* were probably acquainted with chickens when they arrived in their present territory, for they use a *Guaraní* term for them. Pets are not numerous in their villages; most of them are parrots which were captured by means of a noose attached to the end of a long pole. In order to approach the wild birds, the Indians use tame parrots and decoys.

C [223]

C 252

Cooking.—Maize is prepared in a great many ways. The grains are eaten on the cob, roasted in special pans, boiled in water, or ground into flour, which is served with every meal. One method of preparing maize flour is to steam it in a perforated bowl.

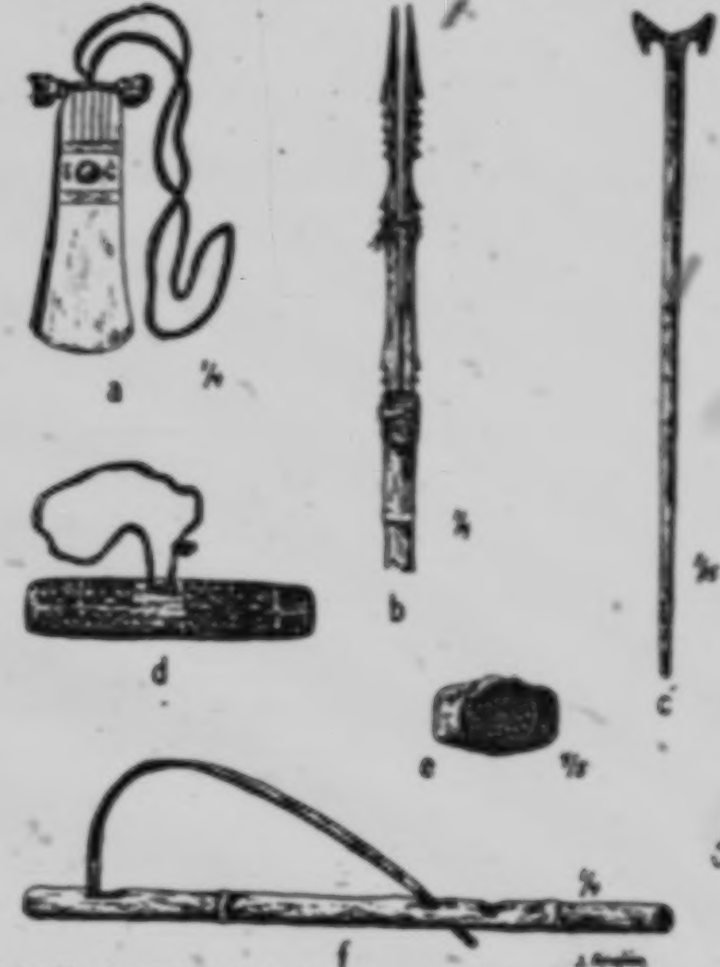
2:Métraux E-5 (1929) 1948 SF10 Chiriguano SF10

Chane: SF 8

MANUFACTURES

c 323 531

Pottery.—*Chiriguano* pottery is, for the beauty of its painted decoration and the variety of its forms, outstanding in modern South America. The mixed origin of *Chiriguano* culture is reflected in the two types of earthenware vessels. The plain pots for cooking and the large jars for chicha, which did not differ from similar vessels of the Paraguayan *Guarani*, were ornamented with fingernail impressions (pl. 41, *bottom, right*). c [171]



c Ce 301
c Ce 411
c Ce 412

Ce 524 531 301

Ce 301 531

Ce 524

FIGURE 59.—*Chiriguano* and *Chané* manufactures. *a*, Silver pincers used as breast ornaments; *b*, bird arrow point; *c*, handle to wooden spade; *d*, wooden whistle used as ornament; *e*, tin labret with mosaic inlay; *f*, *Chané* pea-shooter. (*a, d, e*, Redrawn from Rosen, 1924; *b, c, f*, from Nordenskiöld, 1920, figs. 29, 15, 5, 34.)

2:Métraux E-5 (1929) 1948 SF10 Chiriguano SF10

Chane SF8

are based on a triangle surmounted by a scroll, which is multiplied in countless variations. C 323 [531]

Women potters (pl. 41, top, left, and bottom, left) tempered the clay with crushed potsherds and built up their vases by coiling. They painted them with several kinds of ocher and with black obtained from resin. C [762] [786]

Spinning and weaving.—Among the *Chiriguano*, wool is more commonly used than cotton for textiles, but *Chané* fabrics are generally of cotton. The fibers are spun with a drop spindle weighted with a clay whorl (pl. 42, *center*). Although garments are in part Andean in shape, the loom remains of the vertical type. Formerly, indigo was the favorite native dye; today aniline dyes have entirely replaced it. The ornamentation of the fabrics is limited to a few stripes. C C 286 283 171 286 [531]

Netting.—Fishing nets and carrying nets are made by means of a wooden gage in a reef-knot technique. C 285

Basketry.—Fans, round baskets with overlapping lids, and sieves are twilled with palm leaves in the best Guiana fashion, but wickerwork basketry is very common. No large baskets for carrying or storing food are made.

Gourds.—The painted, incised, or fire-engraved (fig. 61) gourds (*Lagenaria siceraria*) used as cups are, after pottery, the best expressions of *Chiriguano* art. The motifs are mainly geometrical, with occasional realistic representations. C 415 531

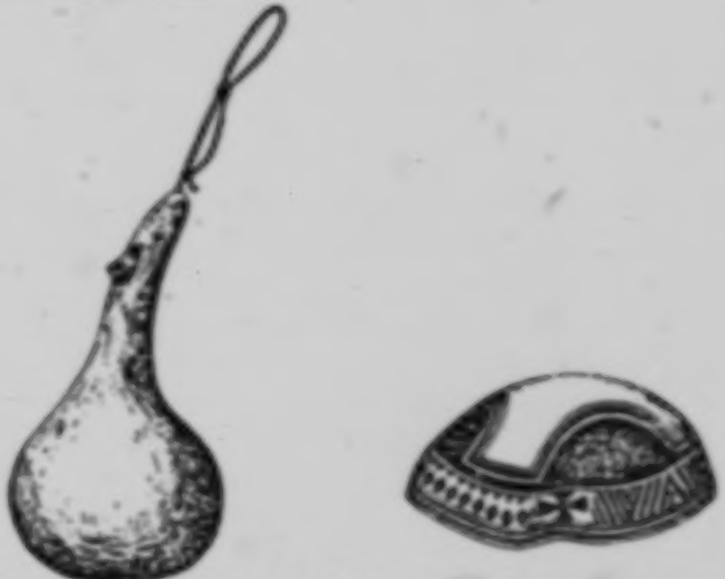


FIGURE 61.—*Chané* calabashes. *Left:* Specimen with lid (approximately ½ actual size). *Right:* Pyrograved specimen (approximately ½ actual size). (Redrawn from Nordenskiöld, 1920, fig. 30 and Métraux, 1930 b, pl. 62.)

Chane SF8

C Ce 372

Fire.—For several generations the *Chiriguano* and *Chané* have used steel and flint for making fire. The fire drill is, however, remembered in their mythology.

C 411

Weapons.—The *Chiriguano* bow has an average length of 4 feet (1.2 m.); the stave is flat on the belly and convex on the back. Both ends are sharpened to prevent the string of twisted hide from slipping.

C [223] Ce [226] [411] [824] Ce 411 824

Arrows are tipped with carefully barbed rods, with two rods barbed along the outer edges, (fig. 59, *b*) with flat lanceolate heads, or with a conical knob (bird arrow). The arrows armed with two diverging rods are used to shoot large birds, such as the yacu (*Penelope* sp.). Fishing arrows of the *Chané* bristle with cactus thorns. Today arrows ending in a sharp wooden rod are rare, as the modern arrows are usually tipped with heavy wires. The shafts are made of cultivated reeds (*Arundo donax*). Formerly, the *Chané* used the uva grass (*Gynerium sagittatum*). Feathering, which is of the cemented type, is sometimes omitted.

C 411 [171] [178]

The clubs of the *Chiriguano* in the 17th century were short and ended in a flat, oval head, a shape somewhat related to the ancient *Tupinamba* club. These clubs have disappeared (only a single specimen could be obtained in 1929 by Métraux) and have been replaced by simple cudgels that serve only to knock down wild pigs.

Ce [411 Ce 824

Chiriguano in direct contact with the *Quechua* have woolen slings; those living farther to the east have slings made of caraguatá fibers, which they use mainly to chase birds from the fields. The pellet bow is common among the *Chiriguano* and *Chané*, but is merely a toy for boys.

SOCIAL AND POLITICAL ORGANIZATION

C 621 613 596 594

Originally, the *Chiriguano* community consisted of a few extended families or lineages, strictly patrilineal. Modern villages are composed of many small biological families bound by relationship ties or by their allegiance to a common chief.

C 622 [643] C 623 756 357 565 622

Chiriguano chiefs (mburubicha) of old were men distinguished by their courage, their eloquence, and often by their magic power. They enjoyed considerable prestige and held no little authority. Some of them (tubicha rubicha) extended their influence over a wide area and were recognized as a supreme chief by the local chieftains. The main function of a chief was to settle quarrels within the village, to punish thieves, to see that people worked in the fields at the proper time, to arrange feasts, and to lead his men in war. Chiefs also had right of eminent domain over the land. Sometimes a chief was assisted by an informal council consisting of shamans and of the oldest and bravest men of the community. As a rule, a chief, even if he was powerful, led the same type of life as any of his subjects; in recent time some chiefs had servants. Some aristocratic pride was evidenced by the members of their family.

852 **Initiation rites.**—Some time between the ages of 7 and 12, a boy had
304 his lower lip perforated by a shaman, who used for this purpose a sharp
deer horn. The ceremony was performed only when a sufficiently large
group of boys in the village was ready for it. Before they underwent
the ordeal, the boys were told that they must show fortitude and that
subsequently they could give up the affirmative "á, á" for the masculine
"tà." A short period of fasting followed the operation.

851 **Marriage.**—In contrast to the free life led by Chaco girls before mar-
● 191 riage, *Chiriguano* girls were expected to keep their virginity and were
carefully watched by their mothers.

Chomé (1819 b, p. 202) says that a suitor provided his prospective
583 father-in-law with crops and game. This statement suggests bride serv-
191 ice, a custom widely spread among *Guarani*-speaking tribes and one ob-
served by the *Chané* of the Parapeti River a few decades ago. The bride-
591 groom settled temporarily or permanently with his wife's family.

595 Polygyny, at least in recent times, was restricted to chiefs or to men of
622 wealth. A man's wives generally lived together in harmony, but in many
556 cases they were kept in separate villages. Polygynous wives were often
sisters or a mother and her daughter.

763 **Death.**—If the condition of a person was deemed fatal, he was sur-
rounded by a group of women who gave vent to the most spectacular
outbursts of grief. This anticipation of the funeral was regarded as a
manifestation of affection and respect. The deceased, painted and
764 dressed in his best clothes, was placed squatting in a large chicha jar
and was buried, accompanied by his possessions and some food, in the
hut where he had lived. The urn was covered with a large jar or plate.
765 The closest female relatives cut their hair and deposited it on the grave.
The widow, her head covered with a rag, mourned for a whole year,
wailing at certain hours during the day with all the appearance of pro-
found sorrow. She could not resume normal life until a close relative
of her dead husband had suggested that she forget her grief. A drinking
bout marked the end of mourning.

775 The soul on its journey to the land of the dead (iwoka) faced many
ordeals. It had to walk under a wall of fire, over a boiling lagoon, between two onrushing rocks, and between the blades of gigantic scissors. Finally, the deceased reached a land where the dead lived in abundance and joy. This pleasant heaven was open only to those who had never violated traditional custom.

WARFARE

721 **Intertribal warfare.**—Raids to steal crops or cattle or to kidnap women were the main causes of intertribal warfare. The head chief convoked the lesser, i.e., village chiefs, harangued them and listened to their advice. Women performed a special dance and sang to stimulate the courage of the warriors, whom orators constantly exhorted to fight.

2:Métraux E-5 (1929) 1948 SF10 Chiriguano SF10

Chané SF8

273 plicated affair: the grains are crushed in the mortars, and chewed flour 462 is added to the meal, which is thoroughly boiled for many hours in large Ce 273 jars. The *Chané* of the Parapeti River make a fermented beverage of C sweet potatoes.

Ce 525 [177] **Gambling.**—*Chiriguano* and *Chané* are acquainted with the suka game of the Chaco Indians, which undoubtedly has an Andean origin.[9] Another favorite dice game is called chukareta: a bunch of sticks with one face concave and the other convex are thrown to the ground, after one of the partners has chosen one of the sides. If, e.g., the thrower has decided on convex, all the sticks with the convex side up go to him. C The one wins who gets most sticks (*Nordenskiöld*, 1920, p. 99).

177 525 European dice games are also known. The dice are of bone or clay and have special markings. Many *Chiriguano* ruin themselves at the famous taba game of the Mestizos. It is played with an ox astragalus, which is thrown in turn by the gamblers, who bet on which side the bone will fall.

C 526 [171] **Games.**—Young boys acquire marksmanship by shooting at a rolling wheel. Boys also play hockey, as do their neighbors of the Chaco. They also hurl darts made of a stick and a corn husk. A popular game among children consists in casting a stick so that it rebounds. The one who throws it farthest scores a point, and the first to score eight points in succession wins (Nordenskiöld, 1912, p. 197).

They also throw at each other a shuttlecock made of maize leaves and Ce strive to keep it in the air as long as possible.

526 Formerly, the *Chané* of the Parapeti River, like so many Guiana tribes, Ce played a ball game with rubber balls which they batted with their heads. [439] They seem to have used two kinds of rubber balls, black solid ones and white hollow ones which they obtained from the region of Santa Cruz or from the Province of Chiquitos.

C 524 *Chiriguano* women had a game (itarapoa) in which they threw a stone ball or a hollow clay ball filled with pellets at rows of maize grains placed by twos, one above the other.

Small children whirled tops made of a calabash or played with wax or rag dolls.

C 77

RELIGION AND SHAMANISM

177 797 During 200 years of close contact with missionaries, many Christian concepts have crept into *Chiriguano* religion. Tumpa, or Iandeyoba ("Our Creator"), is commonly held to be the "real god." Aguaratumpa, the Fox God, is a mythological trickster with some features of a C culture hero. He was regarded by many missionaries as the functioning [999] god of the *Chiriguano*. There is some evidence of a solar cult, just as [191] there is among the *Guaraní*. Aboriginally, the *Chiriguano* were mainly concerned with "iya," nature spirits, and with "ana," the souls of the dead.

---

[9] The dice are made of four pieces of wood, flat on one side and convex on the other. The rules of the game are described in the chapter about Chaco games (Handbook, vol. 1, p. 327).

/77 cont./

137 which is purple when mature and opens into three sections
824 when ripe. It has an insipid sweetness, but one which both
[262] whites and Chiriguano like. The color is a bright purple. It is abundant, and in certain years of scarcity it is a resource for human life in the months of February and March. In Chiriguano it is called "Ñacagüina." The caraparí is another cactus, taller than the preceding ones, which also has its congenial land, /78/ since it is not found everywhere. It is admirable for its tall, striated leaves or branches, ash-gray and armed with spines; its fruit is very pleasant and also sought
[342] by foxes. The trunk is soft like that of all cacti; nevertheless doors are made of this wood and are durable enough. The
[759] pulp of the trunk is used medicinally to cure liver ailments, etc. They say that it is even good for goiter. There is another species of cactus which grows to some 20 or 25 centimeters; it is round and thick, striated and armed with spines.
[524] In Chiriguano it is called "Zipepe." The children, as we shall see, make wheels by cutting off its spines, and, making it roll, they use it as targets for their arrows. Finally, there is another which is trailing and long, covering the ground where it grows and making the place impenetrable. This has and
[262] produces a very delicious fruit which is called "Tapiacaru" in Chiriguano.

TILANDSIA. -- This plant is known to the Chiriguano
[342] by the name of "Caraguata guasu." Its special place is the
[283] hills, and among them it has some more congenial to it; it
[492] grows well enough, and its leaves are extraordinarily broad and long and ash-gray in color; in the middle there is a thick stalk which rises quite high and is good wood for house rafters; from the crushed leaves they make cord and from these are made first-rate halters for tying up animals in the rainy season.
[286] The Toba and even the Chiriguano make a kind of net which
171 they call chipa or "añapoca," which is very useful, inasmuch
[482] as the women can carry any weight in a bag of that kind; from
[227] the same they make nets so as to be able to fish in the rivers, and these are pieces of work which would attract attention in any part of the Old World.

*736 [859] /62 cont./ It is only hunted by children, for whom every little bird is a joy and a pleasure.

There is also a species of oropéndola /oriole/, which makes a very funny nest, conical like a globe, with the wide part open toward the top; it hangs it from tree branches by means of long, slender threads. Sometimes there are many nests in a single tree. Neither vipers nor another, large bird can do any damage in such a shelter.

TORDO /thrush/. -- Thrushes are innumerable everywhere from Monteagudo eastward. They fly in flocks. The males are completely black, blacker than writing ink, and the females a kind of tan. They cause incalculable damage in newly planted fields, scratching up and eating the seeds very dexterously. At the time of sprouting they pull up the tender plant of maize, wheat, barley, and rice; consequently they are a true plague, and the moment the farmer is careless, he will harvest only wind for his labor. Their flesh is good, but the Indians only hunt them because of the damage they do. The thrush, like no other bird, takes singular pleasure in following the cattle grazing tranquilly in the field, and some readers will be able to understand the object and purpose of this singularity.

*[825] This type of thrush, called "Cherenchío" in Chiriguano, sings little and has less grace in its song. But there is another class of thrush which is quite amusing. It is found about nine or ten leagues south of Santa Cruz de la Sierra; it is also black, and the female is black as well. It is frequently domesticated and sings with variety and strength. This little animal is a precious thing and an enchanting one. Nevertheless, in the domestic state every small thing which it finds it comically carries off with its beak and hides; it could well be pounds sterling or quintos. It loves its master and abhors strangers, ruffling itself up and pecking furiously.

439 [435] [171] A thrush of this second species is worth something more than five bolivianos or duros in Santa Cruz, and in Salta or Tucumán it is worth up to 30 nacionales. There are Indians in Parapiti and others who /63/ trade in thrushes. They catch

/63 cont./

439 them in the area around the place called Basilio, and they
171 take them in cages to the Argentine Republic.

136 TOUCAN. -- A very unusual bird because of its long beak, which is almost as long as its body. This beak is yellow, red, and black, but very light; otherwise, since it is so large, it would be difficult to hold up. One who for the
[125] first time sees a toucan, called "Tunca" in Chiriguano, thinks that it is carrying an ear of maize in its beak. Toucans go in large flocks and have their favorite places; I know only
[159] one variety of them. It is said that the beak, when ground up
[125] and taken in water, stops the flow of blood. It seems that the toucan only lives in hot climates. If it is taken to other places, it dies.

URRACA /magpie/. -- This flying creature is rather large and abundant. There are several species of them,
[231] differentiated by their plumage. It is easily domesticated, and it is useful in the houses, because it kills all of the bugs or insects which multiply in them, but its size is no larger than that of the toucan. It is as restless and noisy in the houses as it is in the woods.

121 I have put an end to this brief description of the land inhabited by the Chiriguano and what is contained therein. All will understand that I did not attempt to discover and describe minutely each and every one of the plants, each and every one of the quadrupeds, amphibians, and insects, each and every one of the birds, but only those which seemed to me to be of the most importance. If it seems to my readers to be too much, or too little, they will be so kind as to excuse my faults; meanwhile, I am going to begin the real ethnography, which will be somewhat long so that it may be clearer and more pleasant. /64/ /Illustration appears here./

174 /73 cont./
175 understood, because they spoke the same language with slight
167 differences, they joined them, and from that moment the
number of the Chiriguano was increased (1).

> 1. These 4,000 Indians were not of the Guaraní race; they had gone to settle in Paraguay and had learned that language imperfectly; they were called Carios and had killed Captain García.

The 4,000 Indians who fled from Paraguay because of the continual relations that they had had with the Portuguese had, at the time when they formed an alliance with the Chiriguano, a slight tincture of superficial civilization, just as in Mexico the Indians of Tlascala had learned it from Hernán Cortes and other Spaniards. As a result of this trace of civilization they had begun to use some clothing to cover, in principle, the most delicate part of the body; they had stopped eating the flesh of their enemies and prisoners and were more humanitarian in their dealings.

Having established their abode and formed a single
[266] tribe with the Chiriguano, they introduced their kind and
[191] humanitarian customs among their ferocious friends, who
softened slightly their haughtiness and pride, imitated their allies in the manner of dress, and began to abandon the barbarous custom of cannibalism, because of which they are distinguished today, and even for a long time before, from the Toba, Mataco, Tapiete, and Sirionó (2).

[197]

> 2. The Tapiete speak the Chiriguano language with a certain difference, and the Sirionó, it is believed, were ancient Chiriguano, because their language is somewhat similar.

175 The Chiriguano, thus united, continued to multiply
[161] much more and to extend their dominions into the different
departments of the Audiencia, the possession of which they now had in lesser degree. Before a century had passed after the

/76 cont./

174 When experience showed them that they could settle
169 in the regions which they occupy today because the harvests
were certain, they made their homes there and, when invaded, defended the territory at all costs, as has been seen.
241 The region, as was seen in the first chapter, is certainly
433 very fertile; when it is irrigated by rain, it produces every
[161] type of cereal; maize matures exuberantly, and the crops
are splendid with little labor. If the fields are kept free of weeds with a couple of weeding hoes and there is no lack of rain, the Chiriguano can sing all year around the big chicha bowl in the company of his friends.

433 But if rain is scarce, the crops are generally lost, and
241 then the Chiriguano suffers, digs roots for his food, and
sells everything he has, even his trousers and his wife's
511 new tipoy, in order to support his poor family miserably.
[731] In times of scarcity the Indian plants with considerable hope a small patch where it is damp, such as around a lake or /77/ along some stream; plantings of this type are called socorro /succor/, and in fact they are, when roots can scarcely be found. Oh a few green gourd leaves at this time are like syrup in the Chiriguano's mouth! Poor Indian!

Language

197 By what has already been related it can easily be under-
[101] stood that the Chiriguano are descendants of the *Guaraní* of Paraguay; thus the Chiriguano language is very analogous to *Guaraní*, as well as the *Guarayo* language, and it can be stated as a fact that both the *Guarayo* and the Chiriguano languages have the same relationship to *Guaraní* as that which exists among the Spanish, French, and Italian languages with respect to the Latin language, which is their mother (1).

[194] 1. The Chiriguano language has very few
[171] accented words; in Guaraní they are abundant. For example, "abati," maize,

/?? cont./

197 "Cunumi," Ind. do not have an accent
194 on the i in Chiriguano, but they do in
171 Guaraní.

197 In past centuries the race, and therefore the language, em-
178 braced a great deal of territory, but today it is greatly
361 reduced, and I can state without danger of error that it is
162 still numerous in Caipipendi, Pipi, Choreti, Tacuru, Acaico, and in the Potosí and Tarija missions; but in the former places it is scattered among many little towns, while in the latter it makes up respectable towns of 500, 1,000, and 2,000 souls (2).

2. Choreti Guasu is located on the left bank of the Parapiti in Cordillera Province; it almost forms a single town with Membirai, and between the two of them they have about 110 families.

197 Purity of language is now no longer found in any town
178 or in the missions, in the first because of living among
197 whites and continually emigrating to the Argentine Repub-
997 lic, and in the second, the missions, for a third reason, instruction in Spanish, which the missionaries give the boys and girls in the schools; thus, if the race is not finished first, as is feared, because of the continual epidemics and vagrancy, the language will soon be lost, and then the few books that exist will only serve as an historical monument for posterity, which will be able to recognize the merit and labor of the missionaries who spread among them, the Chiriguano, and poured out sweat with the sole purpose of civilizing them in a Christian way (3).

3. There are a grammar, a Spanish-Chiriguano dictionary, a catechism with its translation, Father Corrado's masterpiece, a small Chiriguano-Spanish "Nene" /"Infant"; the work referred to is Nino's Nene Chiriguano/, and many unpublished sermons.

/128 cont./

[124] exist, even among savages, since it could be said that, just as there is no people without God, neither is there a people that does not show Him homage in some way.

771 124 As far as the Chiriguano are concerned, I have tried to find out with special care, constancy, and meticulousness what religion they profess and what type of worship they render to their divinities. But all my efforts have been in vain. This is no doubt due to their state of ignorance as a result of their savage life.

[115] I have asked the oldest men of the tribe about their religion, and I have only received vague and insufficient answers on every point, thus being unable to form any idea, even an approximate one, of the religion which they profess. It is beyond doubt true,

776 775 however, that the Chiriguano have some religion, since they recognize a superior being. They admit the immortality of the soul, rewards and punishments in the other life, and they preserve certain Biblical traditions which would have no explanation if they did not believe in a god and perhaps in the Jehovah of the Holy Bible, or God, Creator of all things (1).

[805] [191] [192] 1. The Chiriguano, like the Hebrews, count the months by moons, and they have other very similar customs. It is very notable that they also have some Hebrew words.

577 771 /129/ The Chiriguano must have a moral code, that is, natural law, perhaps augmented by some traditional precepts, since they admit rewards for the good and punishment for the bad.

The law, to the extent that it is imperative, comes from the same God, but only religion serves as its base, and this teaches men that it is an unavoidable duty to submit to the precepts of the Supreme Legislator, under penalty of falling into grave punishments conceived by Him.

From what has been said, it can be understood as a logical consequence that the Chiriguano do profess some religion, even though this might not be known.

/115 cont./

115 116 because the Indians know that the evil spirit is a phantom, and the soul of the dead a shade: [illegible]. I saw the shade of my son, says the mother.

[illegible] One night while the smallpox epidemic was going on, they called me, being the [illegible] of the Santa Rosa Mission, to catechize a poor and miserable old woman who was some two and a half kilometers from the town. Among those who accompanied me there was one whom I well remember, who is still alive and whose name I shall not forget, who carried a burning firebrand, which was not necessary for me because the night was quite bright. When he was asked the reason for such a thing, he answered: Aña [illegible], to chase away the demons. They all do this especially when they are alone, which is rare, because the Chiriguano only rarely goes out at night because of his fear of evil spirits.

[illegible] From this it can be deduced with considerable probability that the Chiriguano are descendants of the Guaraní of Paraguay. There were in that region, in past centuries, the missionaries of the Company of Jesus, who are famous for their apostolic work and for the suffering which they experienced in the reduction of the region. Because of the missions some of them even suffered martyrdom.

I had the opportunity to read a brief history, which I have mentioned above, written by Father Antonio of this same company, and I learned that the Guaraní believe in sorcerers and saw the Aña, demon, at all times and places. It destroyed the wheatfields and other plantings, did damage in their houses and burned them. Even the Guaraní called the bad spirit Aña which the said missionary applies to the demon (?).

2. A work written in the Guaraní missions of Paraguay.

/144 cont./

Genii

776
171 Where ignorance dominates, superstition is the result, I imagine, since all the tribes adjacent to the Chiriguano must believe in the existence of genii or owners of certain places who, not to offend anybody, are even accepted by some members of the white race, especially when dealing with buried treasures. This is not the least strange, since before the arrival of Christ all humanity, except for the Hebrews, believed in this, and even today in those places where the light of the Gospel has not penetrated a belief in genii prevails, even among enlightened people, because only the Gospel dissipates /illustration appears here/ /145/ the mists from the soul and destroys error, consequences of the fall of the first man.

778
776 In Chiriguano the tutelar genii of a place are called Iya, owner in the literal sense. If the Chiriguano pass by places where there is some genie, they find it difficult to approach, and if one asks them where there might be some limestone or gypsum, they will not tell for fear of the Iya, who would take revenge by killing the Chiriguano who caused the place watched over by the genie to be discovered. If something useful must be taken from such a place, they do it with the permission of the Iya (1).

[778]
[317]
[231] 1. The presence of the Iya in places where petroleum is found is undeniable for the Chiriguano. They will take what is absolutely necessary of this liquid to cure the sores of their horses, cows, etc.

135 When the San Buenaventura Mission was founded, the missionary made every effort to try to find gypsum and limestone, but no Indian was willing to tell where it was abundant. Nevertheless, by chance, while the foundations of the church were being built, it was discovered that many of the stones being used were of hydraulic lime, an abundant vein of which was found about 300 meters from the church itself on top of a hill. Gypsum up to today has not been found in the areas thereabouts for the same reason, but there are signs of its presence. In

/190 cont./

594 The Chiriguano is naturally hospitable, and the stranger is welcomed in any hut of an Indian; he considers himself privileged to receive great persons, equals, and inferiors in his hut, which he at once moves out of in the case of the first, accommodating himself in the plaza or in the corridor, and renders him every service within his ability. The woman brings him water and cooks for him, and the man brings firewood and even takes out to pasture the animals with which he is to continue his trip.

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[431]
[293] If the Chiriguano has anything available, such as eggs, chickens, etc., he asks nothing for them and is quite happy if the stranger /illustration appears here/ /161/ gives him whatever he wants to when he takes his leave. If he has any of his pretasted liquor available, the first thing that he presents to his guest is a cup of this beverage. But today the situation is causing changes in their simple customs because of the refined ones of the civilized person, who has taught him to sell a chicken for as much as one boliviano. It is no longer as it once was, because his home was not respected (1).

> 1. Today they receive friends and acquaintances with respect and affection, because some guests or transients took advantage of the native by demanding things or persons to which they had no right.

622
527
[221] It is also a duty of the caciques to determine the time when the fiestas or public drinking sessions are to begin and their duration; these are generally held before and after planting, before and after harvest. If the rain increases and the previous harvest was very scant, the planting is advanced so that the maize will mature earlier and they will have something to drink for Easter.
622
224 During the other months of the year the cacique directs the public fiestas, the general hunts for jabalíes /wild boar/, quiriquinchos, /ostriches/, deer, chuñas /cranes/, and other wild animals (2).

293
824
171
> 2. Whenever and wherever maize does not grow in quantity, the Chiriguano imitates the Toba

[Text Continues on p. 221]

/161 cont./

273 824 171 and the Mataco; thus the fruit of the *chañar*, *mistol*, and algarroba are used in the manufacture of *chicha*.

Subalterns

621 623 The cacique of a tribe is not alone in political, judicial, and administrative administration. In order to have a more correct administration, he, as sole and supreme authority, selects counselors and assistants, whom he seeks from among the most competent persons of the tribe. The primary advisors are whatever sorcerers there may be; these men are thus feared and hence respected by the people, who make use of them in sickness and calamity, both public and private.

621 624 554 Next in rank as counselors come other men to whom they give the name *Igũira iya*, owner of the stick or baton, according to the signification of the word and which corresponds in Spanish to *hombre de mando ó autoridad* /man in command or authority/. Thus they are the alcaldes, to whom the cacique hands over part of his authority with absolute subordination, so that through complaints, ineptitude, or other causes, the alcaldes are summarily dismissed and then others appointed. In each tribe there is a single alcalde who does everything, because the cacique, in his town, is better than an emperor, not having to lift a straw and spending his time in prolonged idleness.

/162/ The alcaldes in the tribes take charge of the rest of the settlers; in a search for peons they hear the sarcasms and recriminations of their fellows, and many times they definitely disobey them, even going so far as to insult them with: *Mburubicha pa nde*? Perhaps you are a cacique?" (1)

1. In the missions with many tribes there are as many caciques and alcaldes as there are tribes composing them. In this regard the custom of the Indians has been respected for a better and more honest administration.

/169 cont./

Towns

000 It is thus stated in the Holy Scriptures that man from the beginning began to build towns, and all the descendants of the first inhabitants of the earth have followed their example.
186 I believe that my readers have learned that the Chiriguano are different from the other natives who surround them; they consider the Toba and the Mataco to be very inferior, so inferior that they scorn and despise the ornaments and varied feathers that the latter use.

361 The Chiriguano also, as descendants of the first men, love
171 society and like to live in company, in more or less large towns, in well-formed towns, with houses around a plaza, in contrast to other tribes which, in spite of being sociable, form
000 towns as quickly as they disappear, according to need. Thus it happens that wherever they know that there is food, the Toba and the other nomadic races go there; if they are helping a missionary, they abandon him when the algarrobas, the *chañar*, and the *mistol* are ripe (2).

> 2. Polygamy in the world began with Lamec. From Ada, his first wife, he took Fael who lived in cabins; it seems that the nomadic tribes of America are descendants of his.

I have witnessed both cases, the first in the Tigüipa Mission, where on the right bank of its little river three tribes had gathered in 1905, making their miserable round huts with a few stakes, with branches covered with grass, in which men and women, old and young, and dogs covered with mange lived together. I witnessed the second in the mission of San Antonio del Pilcomayo in 1900 when, the algarrobas already being ripe, some 68 Mataco families disappeared, running off into the woods to seek a life of gifts and surrender themselves to drink and dishonesty, turning their backs on the religion which some of them had embraced.

/170 cont./

Modern Houses

342 • 171 [464] [648] A Chiriguano house offers nothing special in appearance, but even those of the mestizos who have settled in their country are of the same form and not rarely worse, because naturally since the mestizo is not very fond of physical labor, because he is not an Indian, it is necessary for him to call on the energy of the latter, and the native is not always inclined to lend him this or that service, from which it follows that their houses are inferior (2). /Illustration appears here./

> 2. I am speaking here of the houses that the mestizos or whites build in the countryside where they live; in the towns their houses are normal; they almost all have tile roofs, and there are also some which are whitewashed.

342 [192] [184] /171/ House in the Chiriguano language is called Ho, which is different from what they call Tapi, hut. The latter are common in large towns and belong to the lazy people, wanderers, and even the poor. It must thus be understood that the construction of a Chiriguano house is a work of no small importance and care, if one considers that the Chiriguano is poor, so poor that he only has available an ax, a shovel, and a knife, and not always these. Because of the importance that I give to this construction, many who do not know these regions could believe that the houses are very fine, but there is nothing fine about them. None of them is beyond the rank of cabins.

342 335 476 I believe that it is indispensable to describe the way of constructing them and the elements available to the Chiriguano in order to carry this out. If the Indian has some luck in sheep, he pays some of his companions with sheep so that they will help him gather the principal timber, and should this wealth be lacking, he begins to cut and strip bark in the woods by himself, selecting timber of good quality, straight and resistant to the action of water. The principal pieces are generally six posts

[Text Continues on P. 235]

/174 cont./
342 second frame, taking care that it is not very tight so that when
281 it dries it will not warp. He attaches this hide from behind with
thongs of the same material, and the result for them is a door
de luxe, which could be envied even by some whites, who, in
spite of the fact that they have hides, either cannot find anyone
to work them for such a door, or who out of avarice and in order
not to spend a few coins do not concern themselves with such
a comfort (2).

342
322 2. Some of them make very crude doors with two pieces of thorny ceiba wood, which they work perfectly with a knife. No Chiriguano puts a window in his house.

Ancient Houses

342
177 Some of my readers perhaps may have believed that the
178 house and its mode of construction just described go back to
the origin of the race. /175/ This belief would be an error,
because they must understand that the above-mentioned is the
result of progress. The method of building houses like the
present ones is relatively new; they learned it from the whites,
especially from the inhabitants of the Santa Cruz area, where
the houses all have galleries, this being noted even in the
capital of the department, although they may be of much more
importance and may be disappearing in the new buildings. But
184 in Monteagudo, Lagunillas, Charagua, and centers where the
Chiriguano have their holdings, houses have gallaries.

These, in addition to giving the houses a better appearance,
in addition to the indisputable utility, are a very great reinforcement
and protection for the walls of the house, not allowing
the torrential rains to wear away or demolish the plastering that
342 they do in all the houses. It is true that many houses of the
● 171 whites in their towns are of adobe, but when the timber is of
+ superior quality it is almost preferable, because this material
REMAINS JOINED BETTER AND IS MORE COMPACT.

000 /175 cont./
remains joined better and is more compact (1).

197 1. When a mission is founded, the first building is the mission house made in the usual way. But in the Potosí missions they are all of timber, and any traveler would marvel at their height and strength.

342 178 The ancient Chiriguano houses were of different form, and they were not alike in size or beauty in the towns. Some were distinguished by their roundness and conical form, and others because they were small and low. The latter had no importance at all and could scarcely even be called huts, in spite of the fact that, to the poor Chiriguano, dominated by his laziness, the smallness of a dwelling does not detract from its importance.

342 171 I am going to deal at some length with the way the houses of conical form were built, because they indicate skill on the part of the builder or because they make one's imagination take wing and fly to China, Africa, and Japan, where similar forms are found and thus make us ever more convinced of the unity of the human race.

As explorers, travelers, histories, and well thought out books say and as is also observed in the pictures of illustrated geographies, it is evident that in China, Japan, Africa, New Zealand, and in the east of Australia not a few of the inhabitants /176/ have houses in conical form.

This form seems to be the original one of the human race, and it is very probable that man has used it in the five parts of the world, since it is even found among the Chiriguano.

342 335 In fact, in order to construct a comfortable house before the Conquest, the clever Chiriguano used the following method. He first obtained a single post of some four or five meters and planted it at a depth of approximately one meter (1).

[476] [574] 1. For any small job for which the Indian must trouble his friends, he would get nothing without offering them a drink. Not even money is so esteemed and appreciated as chicha by the Chiriguano.

/188 cont./

291 replaced by the cloth one, although it costs a
302 great deal; the customs of yesteryear are now
304 disappearing, and those of today, or of the
178 whites, are penetrating rapidly.

302 For the Chiriguano virility consists of a vigorous head of
412 hair; nevertheless, although he prizes hair on his head, he
[831] never allows any other hair on his body, except that of the eyelashes and eyebrows, which he forms into arches. He pulls out the rest of the hair on his face and body with his Tendivaha poha, or tweezers. These consist of some little pieces of tin or a piece of cane slit down the middle, and sometimes a knife. With great patience and bit by bit he pulls out or cuts off all the hair that appears on his chin, thus looking like another woman. Others who are called /illustration appears here/ /189/ which pull out their hair with thin pieces of silver, which they call Mboivera (1).

302 1. During my stay in the territory I saw only one Indian who had a thick beard, but because of this uncleanliness he was considered disgusting. When the hairs grew, he cut them with
[178] scissors. Today the young men are beginning to wear mustaches and goatees, and many shave with razors.

291 The ancient Chiriguano clothing was very simple and too
[171] immoral, as is still seen among these Indians where the civilization of the Cross has not penetrated, such as the Chacobo north of Santa Cruz and others in the Bolivian Chaco. Boys go about naked until the age of ten or twelve, and girls up to seven, at which age they are content to cover the most delicate part of the body because of a trace of modesty which exists among them. Even grown men make use of this most simple garment when they are in the country busy at work or when they are returning to town loaded with firewood or food.

[text continues on p. 260]

/208 cont./

> 593 586 love can accomplish much, and they really love their children, without making much outward show of this.

Finally, the man, whenever he wishes, can dismiss his wife with great ease. He does it with contempt, in biting words, calling her *Cuña pochi*, bad woman, *Cuña imuquere*, lost woman, good only for lighting the fire. No one could endure such scorn for an hour, and she understands that the rascal has won the love of another, younger woman.

515 When a mother goes to the spring or river, she takes her son or daughter with her, bathes herself and also her child, and then grinds up some grains of *Ñetira*, a kind of potash, leaving her hair and that of her daughter clean and shiny. The bath is daily, but the washing of the hair with *ñetira* is not.

/209/ Pregnancy and Birth

843 When a woman finds herself pregnant, she does not give up her customary chores, but goes to the field as usual and fetches from there heavy loads of maize and other things.
482 They use for this, as I have already noted, a kind of close-
285 woven net which the Toba make with the bark of the *caraguata*
● [171] or *maguey*. Those made by the Chiriguano are like the wooden fruit-baskets /*chipas*/. They are open on top, where they have an easily untied cord, in the middle of which there is a wide band for holding the weight with the forehead (1).

482

> 1. The Chiriguano woman lets all the weight of the load she is carrying rest on her spinal column, etc., holding it with her forehead. If the water is some distance away, she does the same; if not, she carries the vessel vertically on her left shoulder, or on her head, where she places a pad of rags.

/214 cont./

845 847 732 I judge that they take away the lives of these unfortunates, not to do them harm, but to do a highly philanthropic act for them, since they would have even greater suffering were they to be left blind, crippled, lame, one-handed, mute, and deaf for the rest of their lives (2).

[171] [734] 2. Similar philanthropic acts are still practiced among the Toba and other tribes; so that they will not suffer much and long, they also bury sick persons alive.

732 Today one sees an occasional deformed person, and these isolated cases are either due to parents not brave enough to kill /215/ their children or perhaps they can be attributed to illnesses contracted at an advanced age. 181 As a conclusion to the present chapter, let it be noted that some have written things about which they know nothing, making the Chiriguano out to be ferocious wild animals without compassion, but a particular fact cannot be used to draw general conclusions. True explorers state, as I do, that in general the Chiriguano is humanitarian; he loves his relatives in life and in death, and they are astounded by the conduct of the whites, who upon the death of their relatives slaughter cattle, drink brandy, and play as if it were a fiesta (1).

000 1. The conduct of certain civilized persons should not be reproved by the world. Even in the most civilized nations there are benefit dances. They drink, dance, and do other things, while the poor or the sick suffer. The Catholic takes out his money and gives it away in secret, without ever bragging about it; this is the true way to help humanity.

/228 cont./

301 [304] The *Tembeta* usually is a small round piece of tin with two little ears or hooks on the sides which serve to hold it in the pierced lip. The circle of the *tembeta* is hollow up to near the surface of the hooks; a little wax is put in it, and the ornaments, such as coralline or little light-blue stones of little value, are set in the wax. What is somewhat valuable is the *Itogüi*, a small green stone in one piece which fills the entire hole of the *tembeta*. I have one of these, and its stone is fixed in place with a little prong of the same tin. The *tembetas* are also of hollow cane and of wood, but never of stone, as some writers have stated (2).

> 2. Though *tembeta* literally means lip stone, this does not come from its being made of stone; the literal meaning comes from *itogüi*, which is a stone. The *itogüi* is also set in those of wood.

178 301 The *tembeta*, already described, is relatively new. Before Christians and missionaries came into their country the *tembetas* were of wood, and they were of the same form as the tin ones, with all the ornamentation, but most people used a piece of hollow cane, especially when they were working. [304] This is a little piece of cane cut at a node, which is thinner in the hole in order to be held in the pierced lip. In these there is neither ornament nor wax, because they are for the poor, and for the rich only when they are working.

301 [435] The *Itogüi* had considerable value among the Indians, being worth a horse, a c[illegible] burro, etc., but, as I have already said, it was a rel[illegible] value, since in Tarija, from where they brought them, their value was two bolivianos. From this it can be concluded that the *itogüi* is not found in ● [171] Chiriguano country. It owes its origin to the Incas or Quichuas /Quechua/. /229/ but it is the Chiriguano who work the *tembetas*, in which they set the *itogüi*, or green stone.

/229 cont./

881 For the piercing of the lip, a full moon is necessary, so
304 that the open wound will not have bad results, will gradually
[821] get larger, and will not form a swelling. The boys who are
ready for the tembeta must not be younger than seven years
of age or older than 12. In the first case they would not be
able to stand the pain, and in the second the piercing would
be difficult because the lip would have hardened.

Thus, when the moon is at its maximum and the boy is
of the proper age, he little by little becomes prepared for the
operation. The mother and father prepare him with loving
words, stimulating his vanity so that he may afterward be
esteemed and loved by the girls. Then they make him under-
[186] stand the need for piercing his lip, so that everyone will know
that he belongs to the noble Chiriguano race and is worthy of
[885] being a member of it; finally, they make him understand that
only when he has the tembeta will the grandees of the nation
respect him and treat him kindly (1).

[869] 1. Christian mothers, to encourage their
sons to endure suffering and even martyrdom
[171] itself, show them Heaven, an invisible dwell-
ing place. The savage infidels encourage
their children with earthly promises, such as
the love of women; qui de terra est; de terra
loquitur; this is the effect of ignorance.

The boy hears the nice things that his parents say to him
as a deaf man hears music. What he considers more and what
occupies all his concern is the pain that the opening of his
lip is going to cause him. Nevertheless, he cannot hide or
run away; he must submit to the operation in spite of his fear
304 of it. In fact, before the full moon the father goes with his
881 son to the house of the surgeon and tells him the reason for his
759 visit, asking him to make his boy into a man. The surgeon-
doctor makes an appointment for the next day or another one,
and in the meantime he looks for a second boy to undergo the

/231 cont./

304 881 [824] Meanwhile the one who performed the operation now gives final admonishments to the boy, and he, following all of these instructions and those of his father, keeps the little tube in continual motion so that it will not stick to the flesh, and on the days that follow he begins to put around it little twigs /232/ from the bush called Yacurimbíu, food of the turkeys. When it has healed, he will cut a larger stick from the same bush and put it in alone, removing the tembetandi, and continue enlarging the hole this way little by little until he can put in a tembeta of hollow cane, which also goes on taking on larger dimensions until it seems big enough. Then he buys a de luxe tembeta and he puts it in, never to remove it again, either day or night, since it would be a great embarrassment for a Chiriguano to appear in public without his tembeta (1).

1. If the Chiriguano were to be without his tembeta while asleep, saliva would run out, because the hole is rather large in most of them.

301 [326] [439] [177] The hollow-cane tembetas are made by every Chiriguano, while those of wood and tin are made by craftsmen. In spite of there not being any blacksmiths or tinsmiths among them and as neither tin or lead nor anything similar is available, the result is that the material for making them is brought from other parts, being bought from the whites, with whom they have maintained relations since the beginning of Tarija, out of which region the Chiriguano were expelled.

The Tembeta in Other Tribes

301 ●171 The use of the tembeta may be another argument for the unity of the human race; indubitably the Chiriguano use it as a tradition passed on from father to son, and thus successively up to our times. The tembeta is found in use by savage tribes almost throughout the world; in Africa the Noers /Nuer/ and

/232 cont./

301 Berry women put pieces of glass and bits of ivory in their lips,
171 respectively; among the Mittoo /Mittu/ and the Lobbatk, men and women wear in the lower lip tembeta that are conical in shape, and in addition the women even wear hoops in the upper lip (2).

2. In many tribes of the world, the tembeta is a mark of modesty, and women who wear it do not show themselves in public without having it in the lip.

In other regions the women are coquettes, only wearing in their upper lip a wood or ivory hoop, which the Sciulus do. Finally, even the Cormá /Korma/, investigated not long ago by the Italian Bottego, wear in their lip wide wooden hoops which increase the wideness of the lip itself.

In North America the tembeta is used by preference by the /233/ women; it serves them as an ornament, and they put around it as many little pieces of wood as they have years of age. The tembetas of the Tapii of Isoso are small, and those of the Choroti and the Tapiete are of wood or of cane; no doubt up until today it was difficult for them to get the metal to make a de luxe one (1).

101 1. The Tapiete are, or were, Chiriguano Indians. They stayed near the inlets, where there is flat land with hills and streams, in order to be able to do their planting.

301 According to what is known through faith, clothing was
773 given to humanity as punishment for its disobedience, a punish-
776 ment which has been converted into the luxury of frequent and extravagant fashions, so also among the Chiriguano does there exist the fabulous belief that the tembeta, which today they consider to be a distinctive mark of the race and a sign of virility, strength, and valor, was nothing other than a bitter and well-deserved punishment which a marvelous and very

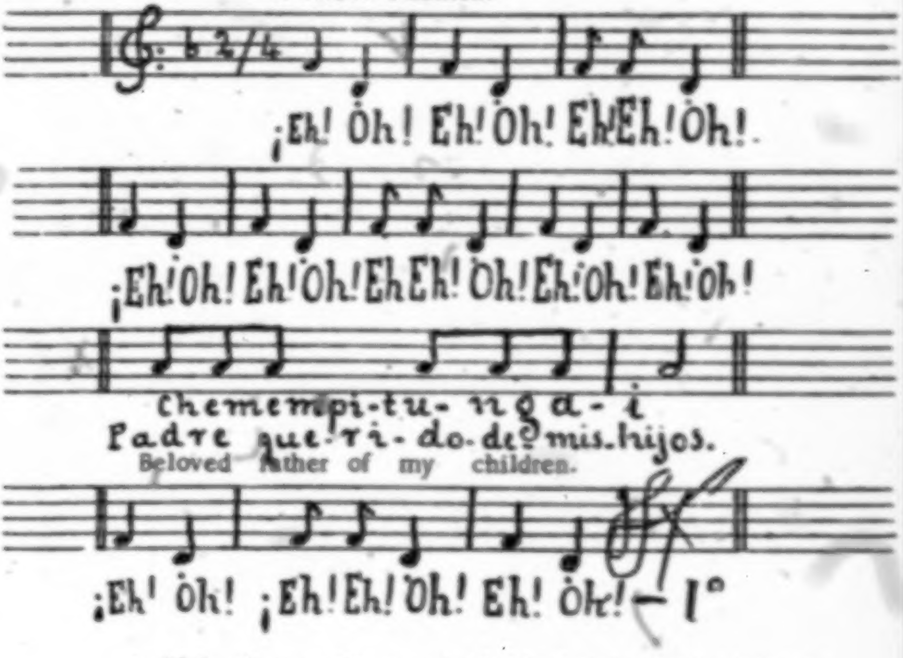
/295 cont./

765 589 of the relatives comes from afar to the house of the departed, he does not greet anyone, but asks where the grave is, goes there, and, crouching down with his face toward the wall, cries for several minutes, and, when this is over, he then greets the living and the conversation begins in subdued tones.

589 765 539 [171] The song, as well as the way of weeping for the dead, is the same in all the tribes, but there are some small differences, as happens in the language itself.

Duelo de una viuda

A Widow's Lament


2/4
¡Eh! Oh! Eh! Oh! EhEh! Oh!
¡Eh! Oh! Eh! Oh! EhEh! Oh! Eh! Oh! Eh! Oh!
Chemempi-tu- nga- i
Padre que-ri-do-de mis-hijos.
Beloved father of my children.
¡Eh! Oh! ¡Eh! Eh! Oh! Eh! Oh! — 1°

1. If the deceased is a grandchild, she says: Chinamanino ngai! Beloved grandchild! And if it is a son or daughter: Chemempi mi ngai! Beloved son or daughter!

171

/For information on the distribution of Chiriguano and Chané material culture throughout the Chaco area and South America as a whole, see category 116, pp. 2-22, 25-47, 51-68, 71-81, 84-92, 95-98, 101-122, 125-146, 164-179, and 182-195./

SF 10
Mojo SF15
Chane SF8

/156 cont./ Ce
from the often vulgar, empty whites. Batirayu, however, is also 115
an exceptional man, the makings of a great man, who is con- C
demned to idleness. Ce

Batirayu is a Chané. These Indians now speak the same lan- 197
guage as the Chiriguano, namely, Guarani. Most of their cus- 171
toms and usages correspond to those of the Chiriguano, by whom 648
they were probably subjugated. According to their origin, how- Ce
ever, they are Arowaken /Arawak/ and hence the most southerly 101
dwellers of this group, which had, and still has, a wide distribution in South America and on the Antilles. C Ce

/157/ If I describe the Chané and the Chiriguano together here, 128
it is because their material culture is so similar. Nevertheless, I 171
have indicated in which tribe I made this or that observation; 771
this is especially true for the religious domain, in which the Chané, at least on the Rio Parapiti, have kept many old conceptions which are unknown to the Chiriguano.

Batirayu told me that a few of the Chané still knew some Ce 197
words of the old language of the tribe. He said that especially 554
at the drinking bouts, when they are intoxicated, they give 273
themselves airs by speaking the old Chané language, which otherwise has the character of a secret language. Cc

In the company of Batirayu I set out for the village of 124
"Huirapembe" where the Indians who knew Chané best were sup- 197
posed to be found. It was not easy to draw their secrets out of 114
them. Actually, only the youngest ones, who knew the least, M
were willing to tell me something (1). One old woman who was Ce
C

1. 192
197

	Chané	Chiriguano	Mojo
Water	úne	y	une
Maize	sopóro	ahuâti	seponi
Fire	yucu	tâta	yucu
Dog	tamúco	yaúmba	tamucu
Chicha (good)	liquí	cângui	itíco
Rat	cõvo	angúya	cozo.

SF10
Chane SF8

/173 cont./ C Ce

Under the influence of the whites, however, the Chané and Chiriguano are gradually changing their huts, and many Indians are already building huts that are identical with theirs. 342 177

No hut here has its original Indian form. The genuine Chiriguano huts (the original Chané huts are not known) were very large; up to 100 persons lived in one house, and the entire /174/ village consisted of only a few large huts (1). These C 342 178 [361] [592] [171]

1. Annua de la Compañia de Jesus. -- Tucuman y Perú -- 1596. Relaciones geográficas de Indias. Madrid, 1885. Vol. II. Page CIV. C [113]

evidently correspond to the large family houses well known in Brazil, which I saw in Bolivia only among the Chacobo, a Pano tribe from Lago Rojo-Aguado.

Even in Viedma's (2) time, at the end of the eighteenth

2. Viedma: loc. cit.

century, /Fig. 83 appears here/ however, they seem to have given up the original type of house and built smaller huts. C Ce

In many villages there belongs to each hut one or more maize granaries (Fig. 84a), in which maize, gourds, etc. are /175/ stored. These granaries are built on piles and are perhaps a reminder of the time when the Chiriguano and Chané lived in swampy regions. To each granary there belongs, as a rule, a ladder (Fig. 84b). Sometimes the granaries and the dwellings are built together into one house. /Fig. 84a appears here./ I saw such huts in the vicinity of Machareti and at Yatavéri, not far from Ivu. Not infrequently the granaries stand in the fields, far from the dwellings. 343 - Ee [361] [174] C Ce 342 343

These villages are neat and clean. Huts and market place are swept daily and the refuse is burned. C Ee 364

The space in the huts is not too cramped. /176/ In each house, as a rule, there lives only one family, which, aside from the rest of the family members, sometimes consists of the husbands Ee 592

C
Ce
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/177 cont./one also sees hammocks in the huts but they are not common. The hammock is native to tropical South America, but it disappears toward the south and in the mountains, for there it is too cold to use it. /Figs. 85 and 86 appears here./

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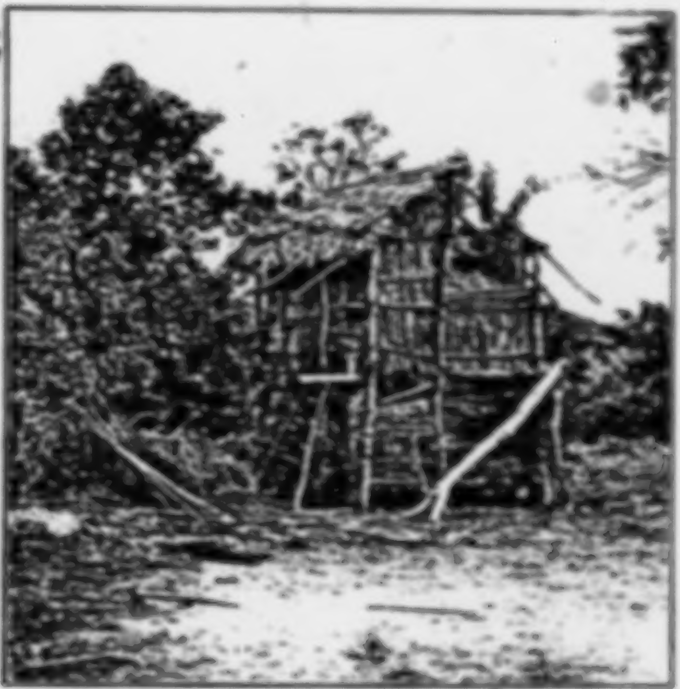

Fig. 84a. Maize granary. Chané. Rio Itiyuro.

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[251]

From the roof of the hut, on hooks and racks, hang clothing and provisions, medicine, and other things. Here the men also keep their bows and arrows, their drums, and similar things. Maize ears are hung by liana loops.

C
/178/

352 Now and then one sees a seat carved out of wood (Fig. 86) in
● 191 a shape especially familiar from the Brazilian Indians.

Ce A great many) clay vessels of all dimensions are always stand-
Ce ing along the walls of the huts. Some of them are so large that
415 [353] a man could crawl into them. There /179/ are pots, there are

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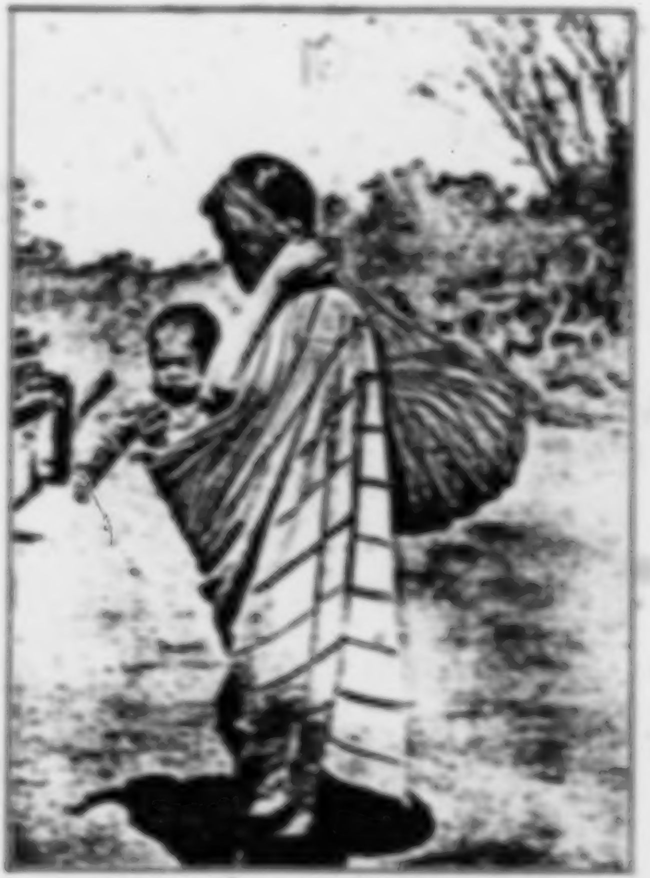

Fig. 87. Chané woman. Rio Parapiti. She has a water jug in the carrying net.

C
Ce
415 roasting bowls, there are handsomely painted vessels which are brought out for the festivals, and there is the treasure pot, in
Ce which the housewife keeps all the valuables and souvenirs of
[556] the family. In it, if the home is "well-to-do," lie clothing,

E. Nordenskiöld--33 E-5 (1908-1909) 1912 SF10 Chiriguano SF10
Chane SF8

/180 cont./

Ee
512
482
[177]

the most common among the Chiriguano. Only those women who live with the whites and have adopted their manners and customs carry jugs on their heads.

Division of Labor between the Sexes

Ee

Here too, as among the Choroti and Ashluslay Indians, each sex, as a rule, has its specific work, as we see from the following table:

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752
171

Table showing the division of labor between men and women among the Chané and Chiriguano.

	Men	Women
Fishing . . .	+	+ (1)
Hunting . . .	+	
Planting, clearing . .	+	
sowing . .	+	+
reaping . .	+	+
Cooking	(2)	+
Carrying wood . . .	+	+ (3)
Carrying water . . .		+
Preparing intoxicating drinks		+

	Men	Women
Gathering wild fruits and tubers		+
Ceramics . . .		+
Woodworking . .	+	
Knotting nets . .	+	
Plaiting rope . .	+	
Plaiting mats . .	+	
Tying hammocks .		+
Leather work . .	+	
Making weapons .	+	

Ee
[226]

1. As a rule, the women fish in shallow water, the men in deep water.

Ee
[252]
[224]

2. Sometimes take part in the preparation of the hunting booty.

Ce
[482]

3. Among the Chané on the Rio Parapiti.

6: Nordenskiöld--34 E-5 (1908-1909) 1912 SF10 Chiriguano SF10
Chane SF8

/181/

C
Ce
462

C
Ce
[464]

Ce
[342]
[842]

	Men	Women		Men	Women
Decoration of calabashes	+		Raising animals. .	+	+
Building houses	+ (1)		Sewing	+	+
Weaving	+ (2)	+	Basketry	+	
Spinning thread .	+		Day labor for the whites . . .	+	+ (3)
Plaiting bands . .	+				

1. On the Rio Parapiti the Chané women gathered the material for the roof, that is, long grass.

2. Only in the case of Maringay.

3. Not important, actually only on the Rio Parapiti.

C
Ce
[198]

Ce
[171]

If one compares this table with the one on page 94 /omitted in the translation/, one finds that heavy wood-carrying and the building of houses has been almost entirely transferred from the women to the men among the higher-standing Chané and Chiriguano. Strangely enough, certain industries, for example, the production of clay vessels, are women's work in almost every primitive Indian tribe. Similarly, the calabashes are decorated everywhere by the men, who also do all woodworking. The reason that the women too fish here is because a number of these Indians live on rivers with little water, in which only small fish live, and in catching them the courage and strength of the fisher are not put to any test.

SF10
Chane SF8

/181 cont./

Branches of Subsistence

C
Ce

Fishing and hunting do not play an important role among the Chané and Chiriguano. As I have mentioned before, they are farmers, primarily maize farmers. These Indians live so exclusively on maize that for them all other food plays a subordinate role. 241 [226] [224] The Indians living on the Rio Parapiti are an exception; they plant more sweet potatoes than maize, and these yield an excellent harvest in their country. C Ce [184]

C
Ce
241

/182/ The following plants are grown by the Chané and Chiriguano:

- Sweet potatoes.
- Maize.
- Squash (Cucurbita pepo Lin.).
- Calabash fruits.
- Beans of different varieties.
- Cotton.
- Urucú.
- Tobacco.
- Tuna (for example, at Yatavéri). Opuntia.
- Millet.
- Mandioca (rare).
- Reed for arrow shafts (on the Rio Parapiti).

C
Ce

In the plantings of these Indians I saw neither ordinary potatoes nor bananas. The sweet potatoes, according to Batirayu's statements, were introduced at a late period by the whites. [137] [177] Tobacco-raising is insignificant. The Chané and Chiriguano are not great smokers. They mostly smoke cigarettes in maize leaves, seldom pipes (Fig. 88). Among them one need not give his pipe to a neighbor for further smoking. C Ce 276

It is strange how the use of tobacco differs among the Indian tribes. The Aymara and Quichua /Quechua/, who chew coca, very seldom smoke. They have no taste for it. C Ce 276 171. The Chacobo and Atsahuaca, two tribes with whom I became acquainted on my travels, smoked just as little. When I offered a Chacobo a 000

SF10

Chane SF8

When I offered a Pacaguara SF19

/182 cont./ Chacobo a P

cigarette, he took only a few puffs, kept the smoke in his mouth 276
for a few seconds, and then threw the cigarette away. Neverthe- 249
less, the Chacobo plant tobacco, but use it exclusively as a remedy. 757
If a Chacobo gets a "boro," a fly larva, "Dermatomya," under
his skin, he covers the fly larva's entry spot with tobacco powder C
and is then able to squeeze out the dead larva in a few hours. Ca
The Choroti and Ashluslay are passionate smokers. /183/ For 276
them smoking is one of the greatest enjoyments of life. These 171
contrasts are quite strange. C

The Chiriguano and the Chané have extensive plantings which, Ce
in contrast to the clearings of the Choroti and Ashluslay in the 241
wilderness, are well tended. In former times they used spades [412]
made of hard wood with attractive handles (Fig. 89), but these [177]
have now gone out of use and have been entirely supplanted by
iron spades. Not infrequently the fields lie far from the villages, C Ce
as, for example, in the Caipipendi valley. This is due to the [312]
fact that water is not available throughout the year everywhere
in the vicinity of the plantings. C Ce

As has been mentioned, the produce obtained is stored in 251
granaries built on piles (Fig. 84), so that it will be at least 343
somewhat protected from rats, moisture, etc. These granaries
are seen everywhere, except among the Chané on the Rio
Pilcomayo. Ce

The fields are fenced in with fences built brush-shaped, which 241
are often difficult to climb over. There is no fertilization of
the fields. On the other hand, a field that has been exhausted
is left to lie fallow. C Ce

The time of sowing is determined by the position of the [821]
Pleiades, "ychu." When this passes across the horizon very early
in the morning, it is sowing time. When the rainy season
begins, everything must be sowed. Ce

The men clear and sow. Everyone helps with the harvest, men, 241
women, and children. Among the Chané in the Itiyuro valley 462
the men sowed the maize, that is, they took care of the larger C
plantings, whereas the women were gardeners and planted gourds, [241]
beans, etc. [462]

C /187 cont./
Ce the Chiriguano and Chané have fewer horses, cows, donkeys, sheep,
231 and goats than the Choroti and Ashluslay. On the other hand, they
have more chickens and pigs. Sometimes one sees ducks, guinea fowl,
C and turkeys. In certain regions, as, for example, in the Caipipendi
Ce valley, where the Indians are wealthy, they also have much livestock.
[184] The whites, unfortunately, try in every way to cheat them out of
[556] what they have. Thus, it is not uncommon for a white man or a white
Ee woman to come into a village with a few kegs of spirits and to leave
[439] it with a couple of the best cows of the Indians. The whites are richer,
the Indians poorer.

C
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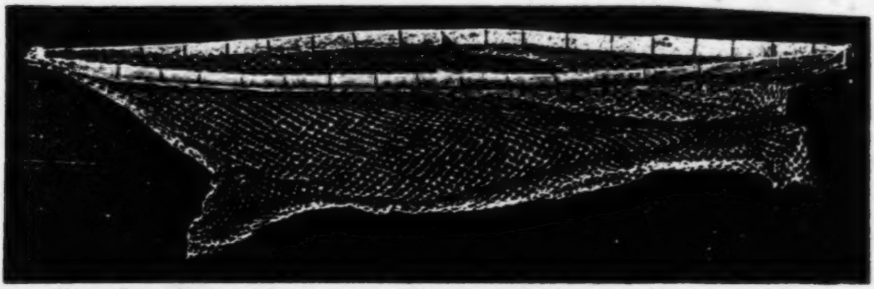

Fig. 91. Net. Chiriguano. Rio Parapiti. Ca. 1/12.

C
Ce The menagerie of tamed wild animals which one sees in the villages
231 of the more primitive Indians is not to be found among /188/ these Indians.
171 A parrot that talks a little Guarani, however, is not unusual in the huts.

Preparation of Food

C
Ce The dirt that we come across in the preparation of food and eating
252 among the Choroti and Ashluslay is not found /Fig. 92a appears here/
among the Chané and Chiriguano. On the other hand, the dishes are
Ee terribly monotonous. They consist of maize in every possible form,
[262] cooked maize, roasted maize, maize bread baked in ashes, maize flour
porridge, and /189/ steamed maize flour. The latter is prepared in an
apparatus illustrated here (Fig. 92).

/192 cont./

On the Rio Pilcomayo three pins were used on each side. The distance between the pins of the opponent was three ells. Each pin consisted of a shelled ear of maize, and the distance between them was supposed to be a hand span (1). The balls

C
Ce
524
C
Ce
[804]
[323]

1. Longest distance between thumb and little finger.

used are made of fired clay and are hollow, with small, rattling pellets inside (Fig. 99). /Plate 17 appears here./

C
Ce
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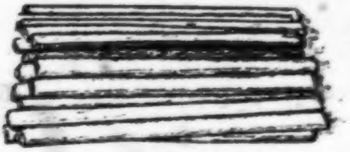

Fig. 95.
Little sticks for the tshúcareta game. 2/9.

/193/ The Life of the Indian Children

C
Ce
855

If one speaks of the life in the villages, one must not forget the children. The children play, but also help the adults. They are reared like the Choroti and Ashluslay children. They spend their lives in happy freedom, without thrashings and harsh words.

C
Ce
524

The Chiriguano and Chané children have a number of games and toys which one never sees the children of the whites in Bolivia use, and all of which seem to me to be genuinely Indian.

C
Ce
857
526
[171]

First of all, the Indian children play the games of the adults that I have already mentioned. Of the Choroti and Ashluslay games, they are familiar with the hockey-like game of ball, which the Chiriguano call "táca." I did not see it played among the Chané. As goals they use pits, and sometimes they hit the

[text continues on p. 47] ball with rackets.

SF10
Chane SF 8
S-Am. Indians S3
Chaco Indians SK4

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● 171

/198 cont./

The games and toys are of great interest from the anthropogeographical point of view. We do not find the majority of then. outside the Chaco and the adjacent regions of South America. On the other hand, we find them in North America. Consequently I have /199/ /Ill. 104 appears here/ /200/ come to the conclusion (1)

1. See also Erland Nordenskiöld: Zeitschr. f. Ethnologie, 1910. Nos. 3 and 4.

S
276
171
S
323
171
172

that the games and toys are vestiges from a time when the cultural exchange between North and South America was greater than now, or, more correctly, that traces of a cultural stream coming from the north extended down as far as Argentina. A peculiar similarity also exists between the types of tobacco pipes that one finds in southern South America and in /Fig. 105 appears here/ North America. The tripod pottery which I found in my excavations in eastern Bolivia, in Mojos, also points to influences from the north.

Everyday Clothing

C
Ce
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177

In the villages in which the influence of the whites has not driven out the old attire, the Chané and Chiriguano women wear a sack-shaped garment, "tiru" (Fig. 106). This, as the photographs show, may be worn in various ways. In former times the tiru does not seem to have had its present shape. Viedma (2) says

2. Viedma, op. cit., p. 181.

the /201/ Chiriguano women merely had a piece of fabric around their hips. Undoubtedly, under the influence of the "moral" Christians, the costume developed so that it became "more decent." /Fig. 106 appears here./

SF 10
Chane SF8

C /204 cont./
Ce and Mataco, who still in part dress in fur cloaks, seem to me,
174 like the Fuegians and Patagonians, to have immigrated to the
515 Chaco from the cold pampas in the south where washing was extremely unpleasant, whereas the Chiriguano and Chané come from the north, out of the warm, humid, virgin forests, from the great rivers, where bathing was always pleasant and refreshing. Now, where /Fig. 109 appears here/ they live under the
C same climatic conditions, the former have preserved their dirt,
Ce the latter their cleanliness.

264 Im Thurn (1) reports that the Indians in Guiana bathe
171
515

C
304

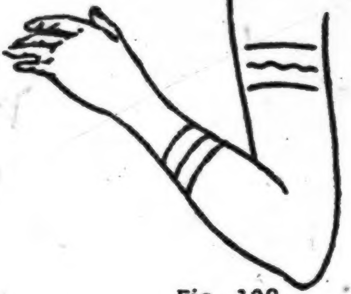

Fig. 108.
Woman's tattooed arm. Chiriguano.
Itapenbia.

C
Ce
264
171 immediately after eating, without any harm to them. I often
515 observed the same thing here.

C The Chiriguano and various Chané shampoo the head with
Ce the seeds of "nyantéra," which they grind. For the same pur-
515 pose the Chané on the Rio Parapiti use the bark of the mistol
824 /Zizyphus mistol Griseb./, "yũag." The nails, and /205/ not
C
Ce least the toenails, are also very carefully tended. For combing
302 they use combs carved in wood or made out of sticks of cane
412 tied together.

1. Im Thurn: Among the Indians of Guiana. London, 1883.

C Ce 514 /205 cont./

The Chané and Chiriguano never relieve themselves close to the huts. I never saw special privies, however, for any Indians, and not for many whites in Bolivia either. Ee [171]

Ee 296 The Chané and Chiriguano are very careful with their clothing. They keep it clean and mend it if necessary. The members of each sex wash and mend their own things. The man here sews quite as well as the woman.

C Ca 128 I have spoken here of the everyday life of these Indians. Now I shall describe the most important events in their lives, in their social life, their festivals, their industry, etc., and

C Ce 412 531

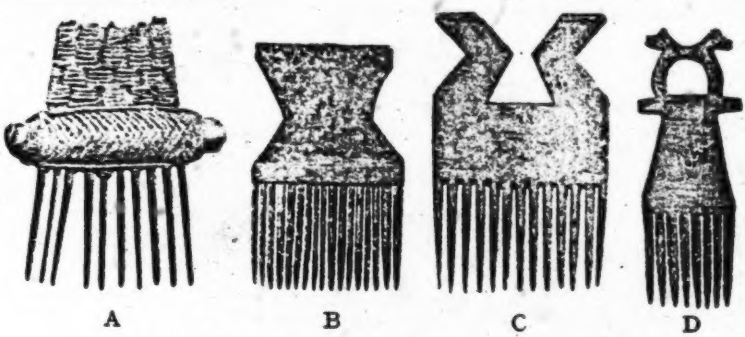

Fig. 109. Combs for combing the hair, not for fastening in it.

A, from the Chané; B, C, D, from the Chiriguano.

Ee 128 finally proceed to their legends and their religion.

/206/

Chapter Twelve

On the Life of the Chané and Chiriguano Indians (Continuation)

From the Womb to the Grave

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Ce
843 The Chané and Chiriguano women work hard even during
Ce pregnancy, until they are to give birth. In Vocapoy's village
[123] there was a pregnant woman to whom I gave a pigeon that I shot.
Vocapoy thereupon told me in great excitement that a pregnant
Ce woman must not eat pigeons. When a Chané or Chiriguano child
844 comes into the world, it undoubtedly does not cause its mother
much pain. These women are healthy and give birth easily, as
C Ce do all Indian women who lead a healthy life and have never worn
846 tight-fitting clothing. They also do not lie in childbed; instead,
C Ce that must be done by the papa of the little one. Here, too, we
[171] come across this strange custom, the "couvade," which is known
Ce from so many Indian tribes. The husband is supposed to lie down
846 for several days and observe a diet. Among the Chané on the Rio
262 Parapiti he is permitted to eat only cooked maize and maize soup
Ce during the first few days, and later sweet potatoes as well. For
[825] several days he may not eat meat. For example, if he eats the
c meat of a goat, he will die, bleating as it does. The Chiriguano
846 Indian Taco told me that he got his fat stomach because he did
262 not observe this important custom. "I should have lain for five
days and stayed on a diet," he said.

C Ce The custom of the couvade, as is well known, is very wide-
171 spread in South America. Among the tribes with whom I am
846 familiar it definitely occurs, aside from the /207/ Chiriguano and
Chané, among the Choroti, Gûarayû, and Chacobo. K. v.d.
Steinen (1), who describes this custom in detail from the Rio Xingu,

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C Ce [N3] 1. Karl v. d. Steinen: Unter den Naturvölkern Zentralbrasiliens /Among the Primitive Peoples of Central Brazil/. Berlin, 1894.

SF10

Chane SF8
GUARAYU SF11

/207 cont./
says it is probably known to all Brazilian tribes. On the other hand, the custom of the couvade seems to be unknown to the Quichua /Quechua/ and Aymara, that is to say, to the mountain culture in Bolivia and Peru. This is one of the many contrasts between the Indians of the mountains and of the virgin forest. C Ce 846 171

The Gűarayű Indians of northeastern Bolivia told me that if a man goes hunting immediately after his wife's confinement and, for example, shoots a parrot, he might kill his child. That is, during the first days of life the soul of the child follows the father. G 846 224 774

Illegitimate children are very rarely born among the Chané and Chiriguano. I believe, perhaps I am mistaken, that the women of these Indians are chaste before they marry. On the Rio Itiyuro, among about 500 Chané, there was only one child born to an unmarried woman. Deformed children are very rarely born. Thus, from what I saw and what Batirayu said, in the entire Parapiti Valley, among 1500-2,000 Chané, there is no one who was born blind, none cross-eyed, no idiot, and only one with deformed extremities, and four deaf mutes. I did not observe any Indians with a serious stutter. C Ce 848 Ce 848 162 C Ce 732 [762]

I do not know whether among these Indians, too, deformed children are immediately killed, but this is probably the case. Nor do I know whether abortion occurs. It is certain, however, that these healthy women seldom bear children who are not well formed. Nevertheless, in the Parapiti valley, as was said, there was a boy with deformed extremities. One hip bone was too short and one arm was also crippled. This boy was treated by all with extraordinary kindness, /208/ and loud approval was expressed when I gave him a few small presents. C Ce [847] Ce [723]

When the child begins to walk, it is given a name. This is not given by the father or mother, but by its grandparents. Among the Chané on the Rio Parapiti I wrote down a few names. If it is a boy, he is called, for example, *yatéurembi* (lip of the tick), *huásucaca* (guanaco), *tâtunambi* (armadillo ear), *yánducúpe* (ostrich back), *vacainyáca* (cow head), *aguárachivi* (fox urine), *derésa paravéte* (your poor eyes); if it is a girl, for example, *árasaypoti* (guava blossom) (1). A great many of the names are C Ce 553 603 Ce 551

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1. *Psidium guayava*.

Ea /212 cont./

581 Marriages seem to me to be happy as a rule. In the village of the Chané chief Vocapoy, I had an opportunity to see several newly married couples. The happiness of the honeymoon month seemed to me unfeigned, and the young wives worked industriously for their husbands. Nevertheless, among the Indians, as among other peoples, there are women of different character. There were some who worked all day long for their homes, and others who seemed to live only to amuse themselves.

C Ce 582 Sibling marriages are forbidden, whereas male and female cousins may marry (at least among the Chané).

C Ce [171] This, on the other hand, as has been mentioned, is not permitted among either the Choroti or the Mataco.

C Ee 595 Among the Chané and Chiriguano there are some who have several wives. This is true, however, not for the young men, but for the older ones, especially the chiefs. Vocapoy had four wives, who lived in different villages. /213/ Taco is said to have seven, Maringay has two, who live together. Old Mandepora (Fig. 111) is also said to have a larger /Fig. 111 appears here/ number. C [643] Ee [586] These older exalted gentlemen often abandon their wives and acquire new, young, and pretty ones.

C Ea 582 Except for these cases, the difference in age between the spouses does not, as a rule, seem to be more than a few years.

C 577 177 797 831 /214/ If one talks to the missionaries about the moral conditions among the Indians, especially among the Chiriguano, they paint them in black colors. The moral conduct of the Christian Indians is, I am afraid, very bad, but in the valleys where the white man has not corrupted the Indians I never saw an instance of promiscuous love, as among the Choroti. Maringay's village is typical of the old customs, and nowhere have I seen as strict C [837] morality as prevailed there. In these purely heathen villages no girl was ever offered to the members of the expedition, whereas this did happen at the mission stations.

C 577 831 175 The following opinion is given by the Jesuit priest Ignace Chomé in a letter of 1735 (1), at a time when they were still

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1. Chomé, op. cit., p. 318.

SF10
Chane SF8

Ee /216 cont./
754 They also sometimes believe that they are bewitched by the
/177 Indians. A colonist, Gutierrez, flogged an Indian. The latter
bewitched him, so that he became ill. Inside his stomach it
C sounded like the croaking of a frog.

Ce The medicine men try to discover the bewitcher with smoke.
755 I did not see how this was done. The bewitcher, if he or she is
754 discovered, is killed.

/217/ In the following I shall speak about the connection
000 of the medicine men with the great spirits.

Ee There seems to be no difference in the appearance and
755 the method of the medicine men among the Choroti and
756 Ashluslay and among the Chané and Chiriguano. It is the same
sucking out of foreign objects that have entered the body through
171 bewitchment. Among the latter the medicine men are more
Ce [177] secretive than among the former. Perhaps their contact with the
whites has had the effect that they themselves are beginning to
C doubt their art.

Ee There is a difference, however, in the common remedies.
757 The first-named Indian tribes obtain their remedies, as a rule,
[171] from the vegetable kingdom. They boil decoctions of certain
Ee plants. The Chané and Chiriguano, on the other hand, except
[237] for certain plants, use animal remedies. Thus, on the Rio
Ce Itiyuro, the Chané use the fat of herons for swellings, wild pig
757 fat for fever, jaguar fat for pains in the bones, and toucan beaks
237 for female hemorrhages. The Chané on the Rio Parapiti use
the fat of the ostrich for chest pains, of the iguana lizard for
conjunctivitis, of the chicken for everything, and maize beer
for colds. I saw fat applied exclusively for external use.

Ce The Chané Indian is remarkable with regard to aseptic
752 treatment. I saw several times how they treat wounds in accordance
with a most modern method, namely, with boiled water. This
is different from the whites' use of pig excrement and the fresh
urine of human beings, along with salt, for the same purpose.
Ce The reason that these Indians are familiar with such a modern
[515] method is undoubtedly their great cleanliness. They are used to
washing themselves constantly. They probably hit upon the idea

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/221 cont./

K. v. d. Steinen (1) and Koch-Grünberg (2) have pointed

1. K. v. d. Steinen: op. cit., p. 25.

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2. Koch-Grünberg: op. cit., Vol. I, p. 133 /Zwei Jahre unter den Indianern (Two Years among the Indians), Berlin, 1909/.

out that even the women among the Indians on the Xingu and Rio Negro speak of sexual parts quite openly, as of something natural. The same is true among the Indians with whom I became acquainted. When I inquired about words touching on the most intimate things, even the women, indeed, the young girls, answered in the most natural manner.

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There are words, however, which are prohibited. Such words among the Choroti are "ametché," which is an abusive word, "ictivãhi," which designates homosexual intercourse, "huéle," which means onanism, and "tévi" among the Chané /222/ and Chiriguano, which has the same meaning as ictivãhi. Here, too, the unnatural in sexual life is so shameful that it is not proper to speak of it.

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There are also Indians who never want to speak about such things. This was true, for example, of a Chiriguano whom I had with me on my first trip on the Rio Parapiti. He even pretended that he had never heard such things mentioned. When I asked him about homosexuality among his countrymen, he feigned stupidity and said more or less: "Is that what the whites do?"

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[831]

Among the Indians, as among ourselves, there are nevertheless some who take pleasure in telling obscene stories. Such a one was the old Chané Bóyra, he who had the abusive name yúruhuasu, big-mouth. The more disagreeable the things he related, the more old Bóyra enjoyed himself. Sometimes he told such things that even my friend Batirayu, who used to interpret, was quite embarrassed. The old Chiriguano Yambási was also one who could tell all kinds of obscene stories.

SF10
Chane SF8
Mataco SI7

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According to Westermarck (2), homosexuality is very widespread among the Indians of America. The conception that this is a disgrace is by no means as marked everywhere as it is among the Indians mentioned here.

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/225/ Among the Chané and Chiriguano I did not hear anything about onanism. Among the Choroti, on the other hand, it is said to be practiced by the men who are ignored by the women at a dance.

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Perversions in the relationship between men and women, which were common in ancient Peru, do not seem to occur here. The primitive mammal position in coitus is said to be common among the Chaco tribes.

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Mataco gave me a root which they used as an aphrodisiac.

The relationship between human beings and animals is so intimately intertwined in the legends of the Indians that one cannot always determine whether they mean the one or the other. The legends that describe love affairs between human beings and animals are not descriptions of bestiality, which seems to be unknown among these Indians.

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The sense of modesty has developed very differently among these peoples. It seems to me to depend very much on the mode of dress. None of these Indian men or women of whom I have spoken here regards it as improper, insofar as they have not been completely corrupted or civilized, to expose the upper part of the body.

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[126]

The Chiriguano and Chané women are much more ashamed than the Choroti and Ashluslay when they expose the sexual parts. The latter were very reluctant to undress completely in order to be photographed. I did not even dare propose such a thing to the former.

2. Westermarck: Ursprung und Entwickelung der Moralbegriffe /Origin and Development of Ideas of Morality/. Vol. II. Leipzig, 1909.

SF10
Chané SF8

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/225 cont./

Nevertheless, if in the evening one sat beside the fire in the hut and was acquainted with the family, they seemed to be quite free and easy. The Choroti and Ashluslay men are very shameless. The men among the Chané and Chiriguano, on the other hand, less so. It is very common for the Chiriguano and Chané women, conversing in a group, to pass water standing up and to let the urine run down their legs, which may be regarded as less than clean. The men, on the other hand, always step aside in order to relieve themselves.

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/226/ As has been mentioned, the sexual act among the Ashluslay often takes place in the presence of onlookers. At the Choroti /Fig. 114 appears here/ dances one had to be careful in the darkness not to stumble over the loving couples. One never sees anything like that among the Chiriguano or Chané. Since many /227/ are lying in the same hut, however, one sees even among them what one always sees if one has overnight guests. This is not the least reason why the sexual life has no secrets even for small children.

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Apparently life with the whites heightens the sense of modesty. The Indian women are even embarrassed to expose their breasts. Morality declines in proportion as the sense of modesty grows.

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This should be taken into consideration by all those who sew clothing for naked heathen children.

Many of my readers may perhaps feel that this chapter should not have been included in my book. Nevertheless, it seems to me proper to say something about deviations in the sexual sphere. It contributes to an understanding of the people whom I am describing here. I have, of course, not been able to speak about all the realism that came out in the conversations around the camp fire (1).

1. If our daily papers, which are meant for the public, write about all kinds of things, one need not be too prudish in a travel account.

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Chane SF8

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/227 cont./

Ee 838
The Indians regard the natural aspect of sexual life very differently from the way we view it as a rule. We do not find among these people all the corruption which is in civilized society, but various things are to be found here already. As far as homosexuality in particular is concerned, conditions among primitive peoples, as is known, show that the cause of the evil lies much deeper than in our hypercivilization.

/228/

Chapter Fourteen

On the Life of the Chané and Chiriguano Indians (Continuation)

Chiefs and Laws

Ee 622 [illegible] [71]

The chiefs have an entirely different position among the Chané and Chiriguano than among the Ashluslay and Choroti. They have considerable power. Among the chiefs there are the great chiefs, who rule over several villages, and the village chiefs, who have command over only one village or a part of one.

Ee 643

Among the great chiefs whom I met, the noteworthy ones are the old woman Vuñyruyi, the chief over the Chané villages on the Rio Itiyuro, Taruiri, who rules over most of the Caipipendi valley, Mandepora (Fig. 111), who in former times had considerable power in and around Machareti, and Maringay in the Iguembe valley.

Ee 622 293 [illegible] 643 [301] [302]

Nowadays the chiefs have no symbol of their office other than silver-mounted sticks. According to Corrado, they formerly wore a large tuft of hair on the head, "yattira," as well as green stones which hung at their ears. At the festivals and dances they had the right to use the "yandugua," a rod decorated with a bunch of ostrich feathers, and "iguirape," a staff carved with peculiar figures. Of these I was able to acquire only a yandugua. I did not even see the rest.

Ee 622 555 643

The office of chief seems to be hereditary as a rule. Capability and the art of using words well are required, however.

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Chapter Sixteen

On the Life of the Chané and Chiriguano Indians (Continuation)

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Art and Industry

285 The Chiriguano and Chané are tribes whose art-industry
323 is on a very high level. If one visits one of the huts of the white
177 settlers in these regions, one will not see many products of native
industry, not much of their own culture. I know of absolutely
nothing that these people are capable of doing which can compare with the pottery and the weaving technique of the Indians.
C
Ce One thing is certain, the more "civilized" the Indians become,
[273] the less they accomplish in the way of art and industry. They
do not learn much more from the whites than how to make and
drink liquor. Indian art-industry is gradually disappearing here,
the more the Indians come in contact with the whites, but it is
C not transformed. It remains largely purely Indian until its final
Ce
325 destruction. One industry, however, is now in the hands of the
●171 whites, namely, the metal industry. The silver ornaments which,
for example, the Chiriguano and Chané use are made by the
439 smiths in the villages of the mountain regions. The half-white
000 or Quichua /Quechua/ Indian population which we come across
in the mountains west of the land of the Chiriguano and Chané
Se Indians is quite skilled artistically. The weaving technique in
288
177 particular is very highly developed there. The Chiriguano and
C Chané undoubtedly learned a great deal from the west.

534 Thus we find the serére pipe[2][1] (Fig. 120) characteristic of
171 the Chiriguano in collections from the coast of Peru (1); /Plate
291
413

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1. Serére also occur among the Lengua, Ashluslay, Chiriguano, Chané, Churápa, and Yuracáre.

19 appears here/ /243/ the pin for fastening women's clothing

[2] [A flute-like musical instrument--Analyst]

[TEXT CONTINUES ON P. 94]

C /243 cont./
● 171 (Fig. 130) is typically Peruvian in form, as is the silver hair remover,
291 of which, however, I have no specimen. The festive
[534] costume of the man (Fig. 81) also seems to me to have a Peruvian
[413] cut. It is possible, however, that the influence of Peru did not
C 177 manifest itself among the Chiriguano until after the conquest of
the plateau by the Spanish.

e 131 Boman (1) has proved that the Chiriguano, or more correctly
172 the Güarani tribe to which these Indians belong, formerly extended much
e [113] farther south than they do now. He found there the grave urns so characteristic of them.

C Ce 171 The material culture of the Chané Indians does not, in general, differ very
much from the culture of the Chiriguano.
Ce [323] The Chané, on the other hand, who are
more isolated on the Rio Parapiti, have
a completely independent pottery which we
C→ do not find again among the
[534 Chiriguano. If we compare the
531] remaining products of Chané
C and Chiriguano industry, we do
[184] not find any greater differences than we find in the various
Chiriguano villages themselves.

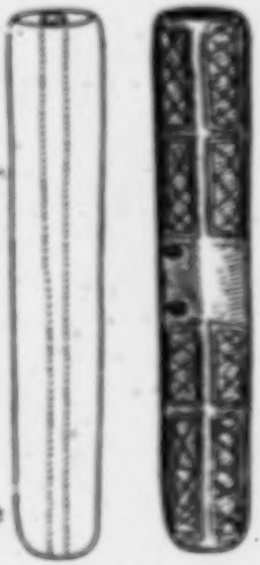

Fig. 120. Serére pipe. Chiriguano. 1/4.

C For example, if one collects clay vessels in the Iguembe
323 valley and in the Caipipendi valley, both of which valleys are
184 occupied by Chiriguano, one inevitably finds that the pottery,
though strongly related in ornamentation and form, nevertheless
/244/ also varies locally. I have already spoken of the individual
variations (p. 85).

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1. Boman: Antiquités de la Région Andine. Vols. 1-2. Paris, 1908.

SP10
Chane SP 8

Ee /249 cont./

439 177 When we present a collection from the Chiriguano and Chané, we must not forget that, through trade between the tribes, they have obtained many things from the Mataco, Toba, Choroti, and Tapiete; otherwise we would have a mistaken conception of the great difference /249/ between the material culture of the Chaco tribes named here and the Chiriguano and Chané. Ee

● 171 If we compare the material culture of the Choroti and Chané with that of the Choroti and Ashluslay likewise described here, we must remember the following. The Chiriguano and Chané produce basket work -- the Choroti and Ashluslay never. The former know how to paint clay vessels before firing, which is unknown to the latter. The Chiriguano and Chané never make bags out of caraguata, etc. If, moreover, we compare all the products made by the Chané and Chiriguano with those of the Choroti and Ashluslay, we find that most of them are entirely different. The Chaco Indians probably learned how to make certain things, such as the serére (Fig. 120) and huiraminibi pipes (Figs. 36 /omitted in the translation/ and 80), from the Chiriguano, but this is relatively insignificant.

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C Ca [323]
Ee [286]
C [415] →
[531]
C [177]
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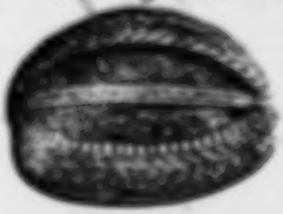

Fig. 128.
Decorated calabash bowl.
Chiriguano. Yacuiba. 1/5.

177 We see here how two cultures can exist side by side for hundreds of years without mingling.

Ee 101 If we follow the Rio Pilcomayo down toward the mountains, we first come across the Quichua /Quechua/ culture, then come the Chiriguano and Chané, and after that the Chaquenic /Chaco/ culture which embraces equally the Mataco, Toba, Choroti, and Ashluslay; as well as the Lengua and other tribes in the Paraguay Chaco. These three cultures are entirely different.

Ca /234 cont./

539 The frog promised to steal fire for them. He hopped to Tumé's campfire and, trembling with cold, sat down beside it in order to warm himself. From time to time he raked the coals closer to himself, as though to warm himself better, and, when no one was looking, he stuffed a little firebrand into his mouth and hopped away.

Having come back to the boy and the girl, he made a fire, and since then the Chané Indians have had fire. The sister and the brother, who had now grown up, married, and she became pregnant. They built themselves a hut. The girl had children. When these children grew up, they married one another. From their children came all the Chané. The chiefs are descended from the children of the oldest boy.

It may seem strange that I found two entirely different legends that deal with the same subject among the same people. This is to be explained by the fact that the Chané are a dispersed Ca tribe which no longer has its own, independent culture.

[177] The first version is probably their own, whereas they have borrowed the other from the Chiriguano. Domenico del Campana (2) mentions that the latter have a river legend in which two children Ee are saved in a clay vessel in a similar way.

539 [171] The Chaneti and the Mataco say that the world was destroyed by fire, the Chané on the Rio Parapiti that it was destroyed by storm, and the Chiriguano and Chané on the Rio Itiyuro that it Ca [184] was destroyed by water.

The first-mentioned live in regions where there were great /235/ pampas fires, on the Rio Parapiti there are often violent storms, and the Chiriguano probably came from regions where great floods are common.

It is certain that these legends of world destruction are intimately connected with the character of the country in which they originated, as Ehrenreich (1), Im Thurn (2), and others have shown.

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2. Domenico del Campana: op. cit., p. 21.

1. Ehrenreich: op. cit., pp. 30-31.

SF 8
Chane SF8

Ea /255 cont./

539 [113] 2. Im Thurn: Among the Indians of Guyana. London, 1883, op. cit., p. 375.

Ea (171) Ehrenreich says that such an anthropomorphic conception of the sun, as here in the first legend, is unusual in South America.

Ca Visits in Aguararenta (the Village of the Foxes).

539 775 Batirayu told me the following about the beliefs of the Chané Indians with regard to life in the world beyond and in the realm of the dead. Aguararenta (aguara = fox, tenta = village) is a village where the dead, aña, live. It lies in the east. At night the dead there have human form; during the day they go about as foxes, rats, and other animals, or they go into a tree trunk. Every night there are great drinking bouts in Aguararenta. All the Chané, children, women, and men, go there. Bewitchers (ipâyepâchi) and murderers also go to this village. No one is punished in the Chané realm of the dead.

Ca [787] The living have also visited Aguararenta and have told what they saw there. I shall give a couple of these stories here. They give us a good insight into the Indians' conceptions about the realm beyond.

The Girl Who Followed Her Husband to Aguararenta.

Ca [115] Told by a Chané Indian in Aguarati (white fox) on the Rio Parapiti.

A girl wanted to marry a man, but he died. She had been very fond of him. In the morning, /256/ on the day after his death, while it was still dark, she was standing in front of the house of her parents and was pounding in the mortar. Then somebody came and seized the pestle.

"Who are you?" she asked.

"It is I," he said. It was her dead husband. "Do you want to come along?"

/273/

539 Accompanied by Dyori, Tatutunpa set out on his way. Along the way he killed a tapir. Dyori (1) divided it into four parts and devoured it. He even licked the blood from the ground.

[171] 1. Dyori is always described as the insatiable one. He corresponds to Móconomóco in the legends of the Mojo.

Tatutunpa found his mother blind in the woods. She begged him to kill the jaguars who were keeping her captive. "They come to the watering place in order to drink," she said.

Tatutunpa made himself a little shelter in which he hid. Dyori hid behind him. First came "Embaracaya" (2) with her booty. With one blow Tatutunpa shattered her head and threw her and her booty to Dyori, who devoured everything. In the same way he killed "Yahuapinta" (3) and the other felines. He threw them to Dyori, who devoured them all. Finally there came Yahuéte, who had two heads. He asked Inómu for water. Yahuéte was carrying a tapir that he had killed. Inómu directed him to the watering place.

2. A large wildcat.

[136] 3. Puma (Felix concolor).

"No, give me water here, there is someone hiding at the spring," said Yahuéte.

"No, there is no one there, and how should I, I who am blind, be able to fetch water, I would fall," said Inómu.

Yahuéte went to the drinking place. When he reached there, Tatutunpa hurled his club, in order to kill him, but struck only the dried head, and Yahuéte leaped away. Tatutunpa followed him. When Yahuéte saw that he was being pursued, he hid under the "tiru" (women's attire mentioned on p. 52) of the moon.

"Where is Yahuéte?" asked Tatutunpa.

"I do not know," answered the woman (that is, the moon). That was the first lie.

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/273 cont./

"He is hidden under your 'tiru,'" said Tatutunpa and went on.

The moon called after him. "Yahuête is devouring me."

/274/ Tatutunpa went back to help her. She then said it was not true. Tatutunpa went on again. She now called again: "Yahuête is devouring me." When Tatutunpa came back, she said it was not true. Tatutunpa went on again. Again the moon cried that Yahuête wanted to devour her. But Tatutunpa did not go back again. Now Yahuête was really on the point of devouring her.

When Tatutunpa returned to his mother, he said he would see to it that she would be able to see again. He made eyes out of pigeon droppings and clay and set them in her empty eye sockets. Inómu rubbed her eyes, opened them, and was able to see again. Tatutunpa now led his mother home.

Ce
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[114]

Batirayu told me the same legend with a long introduction which is missing in Yambási's story. I shall give this introduction here.

Ce
[71]

Once there was a great drinking bout. Many birds were gathered together there. The chief ordered Aguaratunpa to fetch a girl, Inómu, who was in a neighboring village, so that she might also drink with them. Aguaratunpa departed. When he came to the house of the girl, he met her father.

"Good day, Uncle," said Aguaratunpa.

"Sit down," said the father.

"No, I have come to fetch my niece," said Aguaratunpa. He now asked whether the girl would go with him, which she agreed to do. The girl made herself pretty, put on her necklace, dressed herself in her best "tiru," and followed Aguaratunpa.

When they had gone part way, the girl said: "Why should I go with you who are so ugly," and so she turned back. When Aguaratunpa arrived, the chief asked how it had gone. He now told how the girl had turned back.

"Urapua" (the black vulture) offered to fetch the girl. Urapua set out. When he came to the house of the girl, he said:

/275/ "Good day, Uncle."

"Sit down," said the father.

SF10
Chane SF8

Ce
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/276 cont./

Then the chief asked "Hū́iratucū́hua" to sing and he sang:

"Huaté púhuatḗkos rā́rā́sḗ mā́nura lū́huaya chū́shico ti, ti, ti, ti..."

There was a man there who was at odds with his brother and all the other birds, who did not take part in the drinking bout, but went about and hunted.

Many parrots were sitting on a tree. Among these was a white parrot. "That one I want to catch," he said, and he tried to catch it with a noose on a rod, but he did not succeed. He now aimed with his bow at the parrot. The latter started to talk and said: "Why do you want to kill me?"

The parrot now taught him how he should sing and told him that when he came into the midst of those who were drinking he should stretch his arm up over his head.

He now walked around those who were drinking and sang. Then he went into their midst and stretched his arm up. When he did this, those who were standing changed into birds and those who were sitting changed into stones, except Inómu, Tatutunpa, Aguaratunpa, and Teyuhuasu.

Tatutunpa, Aguaratunpa, and Teyuhuasa did not sit with the others, but stood near by. Tatutunpa said to Aguaratunpa:

"You will see, I shall make the girl pregnant (1). /277/

1. Modified.

C
Ce
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● 171

When she turns her body, it will have happened." He now dug a hole in the earth under the girl...

The continuation of Batirayu's story is almost identical with the one by Yambāsi.

In its basic characteristics this legend seems to me to be genuinely Indian. Nevertheless there are elements in it which seem to be borrowed from the whites, namely the story of the lies of the moon. These do not occur in Batirayu's version of the story. It also reminds me very much of the boy who used to call for help when there was no danger present. When finally the wolves were devouring him, no one paid any attention to him, -- a legend which is well known in Europe and which I heard as a child in Sweden.

Ee 539 171

/277 cont./

Part of this legend reminds one very much of a legend from the Yuracáre Indians given by D'Orbigny (1). There "Tiri," who, in order to avenge his mother, kills all the felines except the jaguar with the four eyes, who takes refuge with the moon, corresponds to Tatutunpa. In former times the Chiriguano and Chané were undoubtedly in touch with the Yuracáre Indians. When the whites conquered the land around Santa Cruz de la Sierra, the Chiriguano moved south and the Yuracáre to the north. On my last journey I also visited the Yuracáre Indians, whom I shall describe later in another book.

Ee 174 177

Ce 539

The Man Who Married the Daughter of the Thunder God, Chiqueritunpa.

Ce [115]

Told by the Chané Chief Bóyra.

In olden times there were once three poor men who had no relatives. They were very hungry. Two of them went forth to look for something to eat. First they came into a large forest through which went a path. /278/ After three days they came to a great plain. In the middle of the plain there was a house. They walked around the house, but found no entrance. Finally, however, a woman came out; it was Chiquéritunpa's sister. She bade them come in. "We are dirty," they said and did not want to go in. She brought maize beer to one of them. He drained four calabash bowls of maize beer. She brought the other one maize beer. He, too, drained four calabash bowls of maize beer. "Go now and bathe," she said, "and wash your heads." She gave them the root of the "yúag" (1).

Ee [113]

1. D'Orbigny. Voyage dans l'Amérique Méridionale /Journey in South America/. Vol. 3, 1. Paris, 1834, p. 212.

Ce [137]

1. = mistol /Zizyphus mistol Griseb./.

/292 cont./

539 came to the edge of the village and played his most beautiful airs, but the girl did not want to go with one who had such a little hut.

When the Tick, Yatéu, Ran a Race with the Ostrich, Yándu.

The tick and the ostrich wanted to put on a race to see who could run better. When they started running, the tick hopped on the ostrich and dug itself into the corner of its eye.

When the ostrich had run a short distance, it glanced sideways to see whether the tick was coming along. Since it was in the corner of its eye, it saw it at one side.

/293/ The ostrich hurried on. When it had run a stretch, it again glanced to one side and saw that the tick was still at its side.

The ostrich ran with might and main. When it was quite close to the goal, the tick hopped out of the corner of its eye and arrived there first.

The tick had won the race.

539 •171 These little animal stories have a very widespread distribution. Thus, we find the story of the turtle and the jaguar almost unchanged in Santarem, at the confluence of the Rio Tapajo and the Amazon River (1).

[143] 1. Cf. Fredr. Hartt: Tortoise Myths. Rio de Janeiro, 1875.

Similar stories about foot races are also known from the coast of Brazil (1) /see footnote 1 above/. These last are found among us too, as is well known.

It has been proved (2), as was mentioned, that certain

2. Ehrenreich: loc. cit.

legends from North America and Asia have traveled as far as

SF10
Chane SF8

c /293 cont./
539 South America. Since, however, this is not the proper place
● 171 for comparative studies with regard to the legends collected
by me, I have contented myself with only presenting the material.

c
539 As we have seen, we learn to understand some of the
religious conceptions of the Indians from the legends. They
are also interesting from the viewpoint that a whole assortment
of little features from the life of the Indians is reproduced.
They give us a glimpse into their imaginative life.

c
539 Only the content of the legends collected by me, not
114 the form, is usable as research material. I hope that the
126 native South American ethnographers in particular will add to
the collection made by me and also write down the legends
in the original languages. In order to be able to do this,
however, a complete /294/ mastery of them will be necessary.
The best method would be to let the Indians tell these legends
into a phonograph.

c
Ce
821

The Indians and Natural Phenomena.

Ce
[773] In one of the Chané legends the story is told of how
Yahuéte, the two-headed jaguar, was on the point of de-
c
Ce vouring the moon. Maringay called Yahuéte "Yahuaróhui."
[776] These Indians explain eclipses of the sun and moon by saying
c
Ce that the sun and moon are attacked by Yahuéte. The Choroti,
[171] too, as has been mentioned, speak of a predatory animal that
[776] attacks the sun and the moon.

If one wanders with an Indian through forest and
meadow on a starlit night, the starry sky is his compass and
his watch. He will point to Orion or some other constellation
and show how much farther it will move before one arrives.

Ce
821 He does not give names to many constellations, but he
knows them all. The Chané call the part of the Milky Way
nearest the Southern Cross "yándurape," that is, ostrich-way;
the Southern Cross, along with a few adjacent stars, is

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342 or a district threatened with flooding through rainfall or the flowing in
[114] of the oceanic tide. In my opinion, however, this has usually not been
the case.

342 According to my thinking, it is the fear of predatory animals that has
343 given rise to the pile-construction idea. Those granaries built on pole-
825 supports, that are so commonly met with in widely different countries,
174 have, we know, as a rule been constructed for the express purpose of
furnishing protection against noxious animals, such as lesser carnivora,
● [171] rodents and insects. As an example, the »njalla» of the Lapps is built
as a protection against wolverines[1], and many of the native tribes of
Africa erect their food depositories, or grain bins, on pole-supports to
make them safe against mice and white ants.[2] Both the Balenge people,
who inhabit a fairly arid country, and the Babisa, who live on the edge
of the Bangweolo swamp, build their corn bins on piles.[3] As the Babisa
often build their huts on a platform of beaten clay[4] (not piles, it will be
noted) as a protection against the annual heavy floodings of the rainy
season, this will naturally give rise to the supposition that the Babisa

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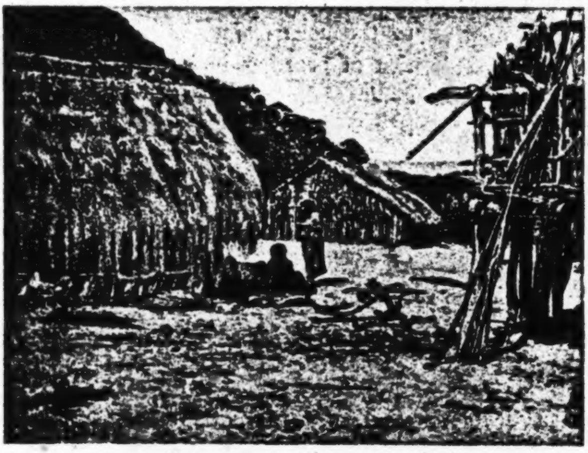

Fig. 192. Part of a Chiriguano village. To the right a pile-barn. Ibitibi. Bolivia.
Photo. E. v. R.

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[1] von Dueben (1), p. 35.

[2] von Rosen (4), pp. 411—412.

[3] von Rosen (4), pp. 332, 349 (fig. A), and 411—412.

[4] von Rosen (4), p. 319 and plate 67 (figs. C and D), also plate 68, fig. D.

[P. 196 is blank]

342 granaries, at any rate, are raised on supports in order to keep the stored
343 crop from getting wet. That such is not the case will, however, be
825 apparent from the fact that the granaries are empty during the time of
●171 the rains. It should be remembered that, in these parts, the period of
174 vegetation coincides with the duration of the rainy season, and that the
crops are harvested and stored only after the cessation of the rains. During the time the grain reposes in the granaries no rain falls at all, and on that account the granaries of the Balenge are often unprovided with a roof.[1] Moreover, Babisa, as well as Balenge, stated that the pile-built grain bins were constructed solely as a protection against damage to the corn from rats and white ants. The practice of erecting buildings on piles as a safeguard against flooding is entirely non-existent in the Bangweolo region.

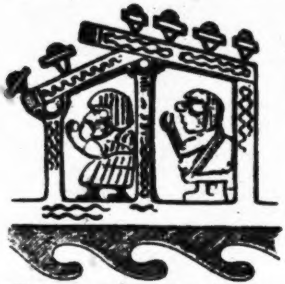

Fig. 193. Ancient Peruvian hut. Vase-painting. After Joyce.

The fundamental idea of storing food in structures built on piles may, in my opinion, be traced back to the custom of primitive peoples of keeping freshly killed meat, and other food, safe from depredation by larger or smaller raiding animals, by suspension on trees. The »njalla», which is erected on a single pole, or on the lopped stem of a growing tree left on its root, may, I think, be taken to be a development of the primitive tree cache. The four-poled Lappish larder called »luopte», or »luove» (cfr. the Swedish words »loft», and »lave»), is on the other hand most probably an imitation of the »hebrä» stores of the land-settled folk, which, presumably, also have received their pile-building construction with a view to forming a protection against noxious animals. For the »hebrä» is probably nothing but a development of the »lave». In order to keep divers implements safe, not only from wild animals, but also from mischievous domestic cattle, such as goats, it is sometimes necessary to construct at the homestead a »lave», the floor of which is either supported by three or four rooted tree-stumps, or by poles driven into the ground (fig. 189). When it is desired to shelter the stored utensils from rain, a roof is built at a suitable height from the floor, and if a still more effective shelter is required, the space between the floor and the roof is filled in with walls. At the stone-age

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[1] von Rosen (4), fig. 325.

experiment carried out at Rockelstad in the summer of 1919[1], the» stone- 342
age men» soon found themselves compelled to build a »lave» so that the 343
goats should not damage such foodstuffs and implements as had to be 825
kept outside the hut.[2] 171

It is my belief that the »lave» has also supplied the idea of building 174
dwelling-houses on pole-supports. Wherever people in a certain stage of civilization have found themselves settled on solid ground, they have had need of raised food-platforms, partly for keeping their foodstuffs safe from damage on the part of domestic as well as noxious animals, partly for the purpose of drying, smoking or roasting the food (see pp. 38, 47 and 48). If such a people, living on the edge of a lake or a swamp, had wished — for defensive purposes or some other reason — to build their dwelling-huts or other buildings in the water, then, if the bottom of the lake afforded good holding for piles, such buildings would have been constructed in the same way as the food-platforms or pole-supported granaries previously employed on firm ground (compare fig. 28 with fig. 115). Where the people in question has been lacking in sufficient skill to construct large pile-buildings in the water, or if the lake bottom was unsuited to this mode of construction, then huts were built on rafts or quagmire islands, after the manner of the swamp dwellers of Alvastra and Bangweolo.[3]

The furnishing of the Chiriguano huts is exceedingly plain. The fire- 354
place, which forms a very necessary heating centre at night during the cold season, consists of a few stones serving as supports for the cooking pots. There is no hole in the roof for letting out the smoke, which has to find its way out through the doorway or through fissures in the walls.
As a rule, the food is generally cooked on a fire outside the hut (fig. 189). [252]

Bedsteads of the type seen in fig. 190 are to be found in nearly 352
every hut. These bed frames are made of laths or reeds, and are covered 114
with skins. Nordenskiöld states as his opinion that the idea of these bedsteads has not been borrowed from the civilization of the whites.[4] In the analytical treatise he has written upon this question he adduces conclusive arguments for his opinion, as it seems to me. In Central Africa, one finds bedsteads
that are very similar to the Indian ones,[5] and that certainly have not [171]

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[1] Klein, pp. 88—89.

[2] Klein (1).

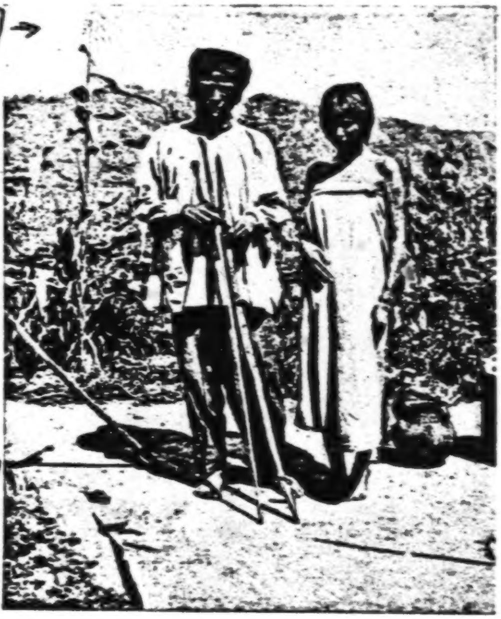
[3] For lake- and marsh dwelling-places in different parts of the world, see Montelius (1).

[4] Nordenskiöld (12), pp. 8—12.

[5] von Rosen (4), p. 403.

352
[114] been imitated from the Europeans. The Chiriguano also sleep in hammocks
[171] made of cotton yarn, and on reed mats and skins spread on the ground.
[513] Stools for sitting on I have not observed among the Chiriguano. They do,
however, possess such articles of furniture,[1] which, however, must be of
353 considerable rarity. Along the walls of the hut will be seen an orderly
415 array of cooking and roasting pots, water pitchers, and pots for maize
[531] beer, arranged in rows, often of exceedingly beautiful shape and with painted decoration (figs. 217—225). From wooden hooks in the roof are hanging bunches of maize cobs, pumpkins or other foodstuffs; arrows, bows, and other gear. From the roof there are also suspended clay bowls (figs. 224 and 225), used as repositories for smaller articles of value. Clothing, ornaments, and such like, are also stored in large clay jars placed on the ground. As bowls there are also used the scaly skin of armadillos, and calabashes (fig. 226).

[352] →



[291]
[302]
[411]
[415]
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[237]
[824]
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Fig. 194. Man and young woman. Chiriguano. San Luis. Bolivia. Photo. E. v. R.

Outside every hut there is, as I mentioned, a fireplace which is generally used for cooking the food, unless the weather makes this im-
356 possible. The huts, as well as the open spaces between them, are kept particularly neat and clean. They are swept every day, and the sweepings are burnt. The huts are practically always free from vermin.

291 The Chiriguano men nowadays generally wear shirt and trousers of
[177] European cut (fig. 194). The poncho shirt is, however, still to be met with among this tribe[2], but only very rarely, and I have never personally

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[1] Nordenskiöld (13), p. 163 and fig. 85 (12), pp. 15 and 16, and fig. 3.

[2] Nordenskiöld (12), p. 59.

seen any Chiriguano using this typical ancient Andean garment. Ponchos 291
of the cloak type, and robes of the kind used by the Chaco Indians, on [171]
the other hand, I have seen worn by the Chiriguano men, who put them on against cold and wet. Formerly the Chiriguano men dressed in the »chiripa», which was a rectangular skirt that was fastened in front to a cord tied round the waist, then passed between the legs, and fixed to the cord above the buttocks. [142] [302] → One may still see, here and there, some small boy wearing nothing but this primitive garment. On their heads the men often wear a broad, red. turbanlike frontlet (fig. 194), and, when setting out on long marches, they put on their feet sandals, the straps of which bear distinct resemblance to straps on sandals that have been found in ancient graves on Puna de Jujuy.[1]

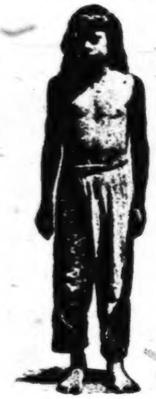

Fig. 195. Chiriguano boy with long, flowing hair. San Luis. Bolivia. Photo. E. v. R.

The women also possess sandals, but, like the men, generally walk about barefooted. The women's clothing consists of a loose-fitting, tubular garment made of woollen, or cotton, stuff. It is called »tipoy». The upper part of it is pinned together over the shoulders by means of cactus spines or metal pins, in the manner seen in fig. 190, which leaves the arms free, or the garment may be fastened under the armpits in the way the girl in fig. 194 is wearing it.

Nowadays the men mostly wear their hair bobbed, and with a frontal 302
fringe (fig. 194), but I have seen boys, not fully grown, with long hair, [178]
hanging loose down (fig. 195). In former days all the men had long hair, which they gathered on the top of the head, where it was secured with a frontlet, a custom not yet quite discarded [412] → in some out-of-the-way parts of the country. The women let their hair grow long, give it a centre parting on the top of the head (fig. 190), plait it into tresses and tie it up, or allow it to hang loose. One may sometimes see girls with short hair (fig. 194), but in such cases the hair [881] ← has been cut short as a sign that its owner has entered upon her first menstruation. On the death of a near relative it is also the custom of the women to cut off their hair. [765] ←

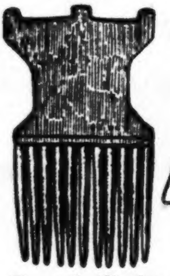

Fig. 196. Wooden comb. Chiriguano. Bolivia. $^1/_2$. Riksm. 03. 3. 829.

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[1] Nordenskiöld (12), fig. 23; von Rosen (1), fig. 84.

$\frac{1}{\wedge}$ [footnote 1 appears on p. 200 -- An.]

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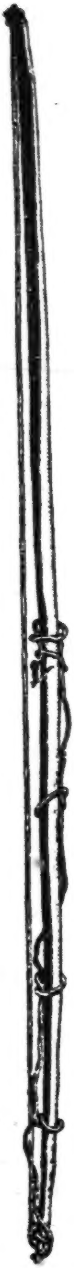

Fig. 201. Riksm. 03. 3. 850. For section, see fig. 203.

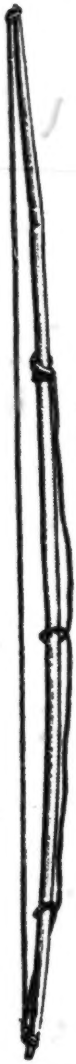

Fig. 202. Riksm. 03. 3. 851. For section, see fig. 204.

Longbows. Chiriguano. Bolivia. About 1/7.

On the left wrist they wore a small piece of wood as a protection against the blow ot the bowstring.[1]

Curiously enough, the present-day Chiriguano type of bow does not seem to have been exhaustively described by anyone; not even in Schmidt's account of South American bow types,[2] otherwise so exact, is there any mention of the Chiriguano bow. The reason for this may very likely be found in the circumstance that these weapons are said to be of rare occurrence nowadays, and that such few specimens as are still being made, are mostly used as toys and on that account typologically degenerated. Twenty years ago, when I travelled through a part of the Chiriguano country, the bow was, however, not so rarely seen as a hunting weapon as now, and I collected the seven specimens now reposing in the ethnographical section of the Riksmuseum at Stockholm. Beside these, there are two Chiriguano bows brought home by Baron Nordenskiöld, one of which is a toy bow. Two other toy bows that have been brought to Sweden by Nordenskiöld belong to the Gothenburg Museum. This forms the material from which I have compiled the following description of the Chiriguano type of bow.

By their string-fastening arrangement the Chiriguano bows differ from the Chaco-Andean bow types, which latter as a rule have no neck-shaped bow-end projections for the string. On the other hand, all Chiriguano bows that I have studied, even the toy bows, have neck-shaped ends for fastening the string, a circumstance indicating that the Chiriguano bow is no acquisition from Chaco-

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[1] de Lizarraga (1), p. 328. From Erl. Nordenskiöld.

[2] Schmidt (1), pp. 1027—1034.

534 same way as Pan pipes; and *naturally gives out tones, when one end of the tube is closed, different to those producible with both ends open.* The pipe is open at both ends, therefore, not only because this allows the instrument to be easily cleaned from dust, dirt and saliva, but also because *this construction gives the possibility of a greater number of tones.*

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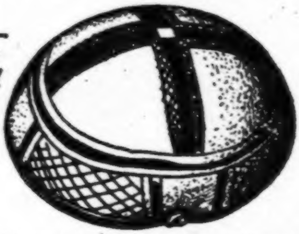

Fig. 226. Bowl, of calabash, up-turned, with pokerwork ornaments. Chiriguano. Carapari. Bolivia. 1/2. Riksm. 03. 3. 831.

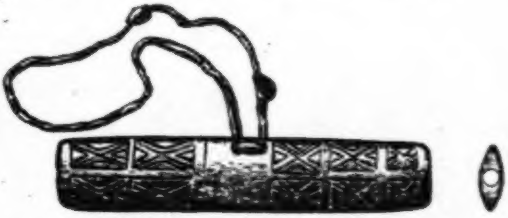

Fig. 227. Whistle, made of hard, black wood. Incised ornaments. Two cracks near one end of the tube have been filled up with a waxy substance. Chiriguano. Aguayrenda. Bolivia. 1/2. Riksm. 03. 3. 848.

534 That the Indians occasionally also give a thought to keeping dust, etc.,
●171 from getting into their whistling pipes, is, besides, evident from the pipe shown in fig. 228, which is an Araucan whistle from Cautin, Chile, a tubular piece of wood, 27.5 cm long. A common brass thimble is fitted over the lower end of the pipe, and for its top end there is a small, well made stopper of woollen-yarn, connected to the pipe with a string, so as not to get lost when taken out for the whistle to be blown. Concerning this stopper, Eric Boman, who has reproduced the pipe in one of his works, writes as follows: »Este tapón sirve para cerrar la boca del silbato, cuando éste no se usa, e impedir que entren allí tierra y otras impurenzas.»[1] »This stopper serves to keep the mouth of the whistle closed when the latter is not being used, and prevents dust and other dirt from entering.»

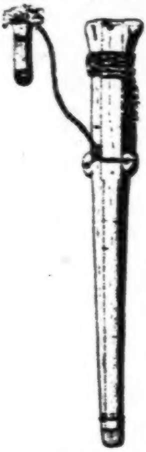

Fig. 228. Whistle, found at Cautin. Chile. From Boman.

Objects of tubular form, in construction corresponding to the one here reproduced in fig. 227, have been found in ancient Peruvian graves, and not only the Chiriguano, but also many other tribes now inhabiting areas in the neighbourhood of what once was the Inca domain, are still

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[1] Boman (3), p. 518.

using whistles of this type.[1] Nordenskiöld has advanced a theory as to 534
the origin of the Serére whistle, which is highly interesting. On the ground 171
of the similarity of construction that this type of whistle has to a balance beam shown in fig. 229, with its cords for weights and load still in preservation, found in Peru, Nordenskiöld is of the opinion that the Serére whistle is probably the beam of a balance, but that its original use has been forgotten.[2] By blowing, in play, into one end of such a balance beam, a tone was produced. This way of whistle-blowing gradually became widespread and popular, and, eventually, whistles were manufactured that were of a construction similar to that of the balance beams of the ancients. More and more the balances ceased to be used as such, and finally it was altogether forgotten that the whistle had been made as a copy of the balance beam.

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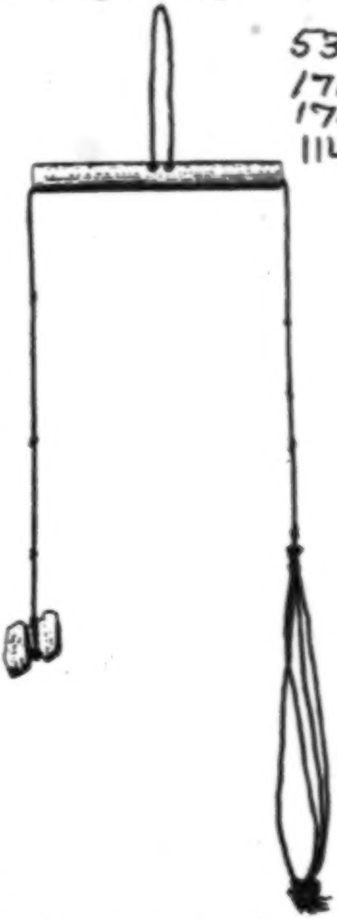

Fig. 229. Scale, with a wooden beam. Probably an improvisation from a whistle of Serére type, which forms the bar of the balance. Ground find from Peru. 1/4. Illustration from E. Nordenskiöld.

On my first acquaintance with this theory of the Serére whistle having originated from the balance beam, it seemed to me so well grounded that I accepted it.[3] But afterwards I quite changed my opinion in this question, for reasons set out below. The ancient Peruvian balance referred to by Nordenskiöld is undoubtedly of a very unpractical construction. Like the Serére whistle, the balance beam is *bored through from end to end*, and provided with *two holes, close together, for its suspension*. Even if in rough and primitive weighing there may occasionally be a certain advantage (a saving of time) in using a balance that is not too sensitive, suspending a balance from two

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[1] Nordenskiöld (11), p. 185.

[2] Nordenskiöld (11), pp. 187—188.

[3] von Rosen (6), pp. 211—212.

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Fig. 230. Ancient Peruvian wooden whistle(?). ½. From Nordenskiöld. One end of the tube has been stopped up, possibly on account of the whistle having been found too hard-blown with both ends open. All other known Old Peruvian objects of this type have both ends open.

points of support, in the way shown in fig. 229, is unsuitable, as it would enable the holder of the balance to influence, with an imperceptible movement of his hand, the balancing of the beam. Another point which strikes me as peculiar, is, that the string by which weights and objects for weighing are suspended, should be made to pass through a hole that runs the whole length of the longitudinal axis of the beam. A perforation of such a length obviously represents a good deal of labour, which, moreover, in the case of a balance beam, would be quite unnecessary. Surely the simpler plan would have been to fix a string through a small hole at each end of the beam.

The above were my reasons for beginning to form the opinion that the Old Peruvian balance, fig. 229, had been rigged up to do duty as a makeshift. A proper balance not being at hand, a tubular whistle, fig. 230, was pressed into service. In this way the ancient Peruvian balance, fig. 229, would — if my theory is correct — simply prove to be *a whistle that had been provisionally fixed up as a weighing instrument.* It is not impossible that this way of hastily improvising a balance — rather a dull one, admittedly, but usable for *rough weighing* — was not infrequently employed. When I acquainted Nordenskiöld with my theory as to the constructional purpose of the balance reproduced in fig. 229, he had the great kindness to send me all reproductions of Old Peruvian balances that were in his possession. Three of these retain the cord by which the beam was suspended (the poising cord), and *in these three, this cord is fixed through a hole in the centre of the beam*, fig. 231. Two of the balances are provided with cords on which to hang the weights and the objects to be weighed. *These cords are not taken through the full length of the balance beam, but attached to it by means of holes bored*

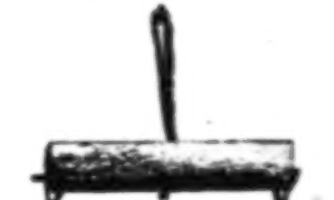

Fig. 231. Old Peruvian scale. From Hamy.

in each of the lower corners of the beam ends, fig. 231. From the illustra- 534
tions representing the rest of the Old Peruvian balances it cannot be seen in 171 ●
what way the poising and weight cords were fixed. The balances in question 174
have, however, been published in Hamy's grand work, Galerie américaine, 114
and from that work I have therefore endeavoured to gain information concerning this matter. There is only one balance, one without weight cords, that has been given a detailed description, and regarding this, it is stated that the beam, at its centre, has *a vertical perforation* (for the poising cord), and that the lower corners of the beam ends are each pierced with a slanting hole (»les angles inférieurs sont aussi perforés mais obliquement»).[1] If one or more of the balances reproduced had been of a different construction in this detail, the fact would no doubt have been noted in the text.[2] From what I have adduced above, it therefore follows that the illustrative material, which Nordenskiöld so chivalrously submitted for my criticism of his theory, most essentially enhances the probability of my opinion that the unhandy Old Peruvian weighing apparatus shown in fig. 229, is an improvisation of a whistle which, as I aimed at proving in a separate monograph, belongs to a type of open whistles which is widely distributed over the American continent.[3]

As mentioned, the Chiriguano live in villages, and it is only exceptio- 361
nally that one comes across isolated huts. Each village is under the 622
authority of a headman, or chief.

Both sexes marry at an early age. Monogamy is the rule, but well- 582
to-do men, and chiefs, may be found who have several wives. When a 595
girl menstruates for the first time, her hair is cut short (fig. 194), and 881
she is kept shut up in a hut until her hair has grown long again, after
which she is considered marriageable. When a boy attains to puberty, [304]
a hole is made through his lower lip, and a wooden plug is put into the [301]
hole. Subsequently this is exchanged for a bead-studded »tembeta» (figs.
194 and 197). Marriages are celebrated by feasting, when large quanti- 585
ties of maize beer are consumed. The women pass through childbirth easily, 574
and therefore do not require many days of nursing after the child has 844
846

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[1] Hamy (I), p. 110.

[2] At the British Museum there is an ancient Peruvian scale apparently of the same construction as those described by Hamy. Joyce (I) p. 130, fig. 11

[3] von Rosen (II).

846
[844] come into the world. But, in observance of a custom largely prevalent
among the Indians of South America, the husband pretends for several
days to be lying in childbed, and then keeps an invalid diet!

755 Illnesses are treated by medicine men, who by incantations and other
756 resorts of magic try to expel the evil.

764 After a death, the corpse is placed in a large earthenware jar, which
763 is put into a hole dug in the ground. According to what a Spanish-
speaking Chiriguano Indian told me, it was formerly customary to sever,
by incision, the spine of a dying person, in order to shorten his death
agony. Before life was extinct, the body was thrust into a huge jar, into
which also ornaments, weapons, food and drink were put, the mouth of
the vessel then being carefully closed up with an earthenware platter. It
was important that the lid was put on before the dying person had drawn
his last breath. By doing this, it was thought that the soul of the dead
[775] would for a time be held in confinement, so that it would not be able to
work any harm on the living.[1] The jar was afterwards interred inside the
dead person's hut.

181 With the exception of the Chané — a tribe on the same cultural
level as the Chiriguano — the latter seem to me a people considerably
superior to the neighbouring tribes, whether inhabiting the mountain
regions or the Gran Chaco. Both the mountain- and the Chaco Indians
are dirty and of uncleanly habits, whilst the Chiriguano on the contrary
[515] are very observant of bodily cleanliness. For example, the Chiriguano
women bathe every day, and often several times a day. Among the
[831] Choroti, the girls are in the habit of living in loose sexual relations with
a plurality of men, before marrying, whilst the Chiriguano girls, as a
● [171] rule, preserve their chastity intact until they marry. Also as regards material culture, the Chiriguano and the Chané are on a higher plane than
their present-day neighbours. When compared with the ceramics of the
[323] peoples of the Chaco, the maize-beer vessels, for instance, that are
characteristic of the Chiriguano and the Chané, stand out as veritable
show pieces.

181 Of old, the Chiriguano have a reputation for being a very warlike
648 nation. As early as in the time of the Incas, this tribe made a raid into
ancient Peruvian territory,[2] and even as late as 1890 the Chiriguano

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[1] Cf. Krickeberg (1), p. 134.

[2] Nordenskiöld (18).

/3 cont./

Ce 101 or Tapyi /Tapii/. it was not possible from what they said to ascertain with which of the tribes known to ethnology they C [101] can be identified. The Chiriguano call themselves "Mbya." If the Izozó were a part of them, they would have called themselves by this name. Ce 101 17 No doubt they are Chané and that part of the latter which once had their homes in the Izozó River region, taking the name of this river for their own. Their culture, as demonstrated by the objects I collected among them, confirms this opinion. There are some differences between the objects collected among the Izozó and the Chiriguano in Machareti, either with regard to the decorations of the baked clay vessels or with regard to the making of the nets. But in principle it is not possible to decide whether these differences C ● 171 177 128 648 might not be only local differences. In general the culture of the Chiriguano was diffused in this way throughout the tribes successively subjugated by them, which is why it is proper to deal below with the aspects of the culture of the Chiriguano of Machareti together with that of the Izozó.

C Ca 101 17

Influences on the Culture of the Chiriguano and Izozó, Taken from Historical Data

C Ce [197] At the present time the Chiriguano and Chané form a cultural entity which can be designated as the culture of the Chiriguano, because the Guaraní language of the Chiriguano came to be the common language of the whole group. The Izozó also belong to this ethnic entity. Thus it is necessary to consider this entity /4/ as being formed of completely different tribes. It is also necessary to conceive of their culture as the product of the fusion of very heterogeneous cultural elements. Nordenskiöld deals with this question in one of his books (1)

C Ce [113]

1. Erland Nordenskiöld: The changes in the material culture of two Indian Tribes under the Influence of new surroundings. Comparative Ethnological Studies, 2. Göteborg, 1920. Cited in the following: Nord. 2.

/18 cont./

380 next one." Garcilaso de la Vega (87) describes the large houses
342

> 87. Vol. II. p. 281. According to Métraux
> I. p. 331.

of the Chiriguano in the same way: they build a very large dormitory, and inside as many alcoves as there are residents, and so small that there is no room for anything but persons.
361 Through detailed descriptions and sketches, we are familiar
342 with the construction of the towns of the ancient Guaraní of
●171 the Tupinambas on the eastern coast of Brazil (58). Four or
712

[113]

> 58. According to De Bry. Métraux, A.: La civilisation matérielle des tribus Tupí-Guaraní /The Material Culture of the Tupi-Guarani Tribes/. Paris, 1928.

five long, rectangular houses were built a short distance from one another around a quadrangular or pentagonal plaza, and the whole town was fortified by a defensive wall. We
361 also know that the ancient towns of the Chiriguano had such
712 defensive constructions through information from the year 1618, when Ruiz Diaz de Guzman found such a fortification of a Chiriguano town near the Pilcomayo River, which consisted of "two concentric walls of stone and of wood" (59). According
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171

> 59. Moreno II. p. 232.

to Serrano (60), the Guaraní towns of the ancient Province of

[113]

> 60. Antonio Serrano: Etnografía de la antigua provincia del Uruguay /Ethnography of the Ancient Province of Uruguay/. Paraná, 1936, p. 125 /the second number of this figure is questionable, being barely discernible in the original text/.

Uruguay consisted of only four to eight large rectangular houses.

/15 cont./

342 171 "In 1627 the Jesuits found near Yapeyú a Guaraní *aldea* with four houses in which some 100 Indians lived. They found identical dwellings in San Ignacio and nearby regions. These houses were quadrangular and extremely long, often in excess of 50 meters."

361 177 178 Even during the time of their independence the Chiriguano had departed from the primordial construction of their towns, which had served in the first place for defense, since at the end of the 18th century Viedma describes their houses as "a few small ranchos made of cane" (61).

[113] 61. Viedma, Francisco de: *Descripción de la provincia de Santa Cruz de la Sierra* /Description of the Province of Santa Cruz de la Sierra/. Colección Angelis. Vol. 3, Buenos Aires. 1836. written 1793, p. 181. Cited by Nordenskiöld.

000 Photographs of Chiriguano Towns (*tënta*) and Houses (o)

I.C. 353. Chiriguano town, Machareti (Fig. 1).
I.C. 355. Scene in the town of Machareti (Fig. 17).
I.C. 356. Chiriguano in front of their house in Machareti (Fig. 14).
I.C. 357. Chiriguano storehouse in Machareti (Fig. 16).
I.C. 358. Chiriguano boys in front of their rancho in Machareti (Fig. 18).

361 [178] [363] [177] [343] The Chiriguano town of Machareti was built in its present form by Franciscan missionaries, with wide, parallel, and right-angled streets, following the common form of old Spanish colonies, since their construction is not a product of the indigenous Chiriguano culture. But in part, the houses and primarily the maize storehouses built on posts, correspond to the houses of other Chiriguano towns, on which we have information from Erland Nordenskiöld and Eric v. Rosen (62).

62. Nord. 1. pp. 173, 176. Nord. 2. pp. 1-3. Eric v. Rosen. *op. cit.*, pp. 191 and 192. Figs. 188-192.

/16/

361 621 162 The town Ibitibi in the southern part of Chiriguano territory, south of the Pilcomayo River, examined minutely by Eric v. Rosen, was inhabited, according to the Indians, by about 300 persons. The town was located on a plain surrounded by mountains and forests. The houses formed a large circumference, the cacique's house being in the middle. Some shade trees had been planted in the open plaza between the cacique's house and the other houses. In other Chiriguano towns visited by v. Rosen, houses were dispersed without any order. According to the observations of v. Nordenskiöld too, Chiriguano towns are sometimes quite large and inhabited by around 100 persons. Often several towns are near one another. The houses are generally around a plaza sometimes planted with trees and serving as a place to play and to hold meetings.

342 We know the form of the Chiriguano houses in detail through v. Rosen (63), and primarily through the good photographs of such houses. [335] The houses are rectangular and their roofs end in points. Walls and roofs are held up by posts. The walls consist either of only vertical poles made from branches or reeds, close together and tied by horizontal ligatures, or of interwoven poles whose interstices are plastered with mud. The roof (opitiá) is covered with straw. One type of house was illustrated in a photograph by v. Rosen (64), on which one side of the roof projects at the top over the other side of the roof. [171] The same house type also exists in the ancient culture of the Peruvians, as is shown by sketches found on the surface of ancient Peruvian vessels.

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63. Eric v. Rosen, op. cit., p. 191; Figs. 188-192 and 217.

64. Eric v. Rosen, op. cit., Fig. 190.

/16 cont./
343 the roof and the /Plates V-VII appear here/ /17/ platform.
335 The middle pair of the vertical posts is the longest pair and
serves to hold up the ridgepole. Of the other eight vertical
posts, always in two, one longer and one shorter, have been
placed immediately next to each other all along the two
sides of the middle pair of posts and at a certain distance from
it. Of the horizontal posts, each one of which is held up by
each one of the five pairs of vertical posts, those which are
placed on the higher pair and on the two pairs of middle size
of the vertical posts serve to hold up the roof, while the two
horizontal posts which are placed on the two smaller pairs of
vertical posts form the base for the platform of the house.
Besides the five pairs of vertical posts that form the frame
of the house, there is also added a vertical post of the height
of the platform, which serves to support the ladder leading
343 to it. The roof of these storehouses is covered with straw like
the roofs of dwellings. The walls are made of reed poles very
close together. While the poles of the storehouse illustrated
in Figure 16 are horizontal, those of other storehouses, with
which we are familiar through Nordenskiöld's photographs and
those of v. Rosen and Métraux, are vertical (69). The entrance, which must be reached by means of the ladder, is at
[417] the gable end, like that of the dwellings. The ladder consists
of a post with notches for steps (70).

[171] There must be some special reason to explain the sur-
[174] prising fact that the Chiriguano have houses built on posts,
since it could not be that they brought the custom of con-
structing them from their native soil, because the Guaraní have
000 never had them. Nor could it be that they adopted this from

[TEXT CONTINUES ON P. 42]

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69. Nord. 1, Figs. 83 and 84 and Pl. 18.
Métraux I, Fig. 9, p. 349.

70. Cf. Fig. 16, at the right. Nord. 1,
Fig. 84. v. Rosen, op. cit., Fig. 191.

343 /17 cont./ Nor could it be that they adopted this from
[177] the whites, because in those regions they have never used
houses built on posts. Neither do we have any indications
[176] that the ancient Peruvians had such houses. It is very unlikely that the Chiriguano settled in their new territory might
have invented the construction of such houses, because the
nature of their territory did not render such a form of construction necessary.
343 In South America we find houses built on posts
•171 almost solely in regions exposed to floods. Thus we mainly
find them in the coastal regions of the northern part of the South American continent, and they appear to the south of the Amazon River only in a relatively narrow zone in the center of the continent including Chiriguano territory. According to Marban in 1676 (71), the Mojo had houses built on posts and doubtless such house constructions were quite useful in those marshy and often flooded regions. In addition Nordenskiöld during his travels (72) found one of these houses serving as a storehouse among the Chacobo, who live north of the Mojo not very far away. Some of the Quichua /Quechua/ houses located between the Chaparé River and the Cochabamba River had been built on posts, but Nordenskiöld himself does not consider this architecture to have been primordial among them. Of the Chaco tribes who have storehouses built on posts Nordenskiöld mentions the Matako /Mataco/. I found such storehouses in the Matako town near Linares, but many of them also in the Churupí installations in Esteros. Nordenskiöld in his publications on the Churupí, whom he calls the Ashluslay, does not

[113] 71. Marban, Pedro: "Relatión de la Provincia de la Virgen del Pilar de Mojos /Report on the Province of the Virgen del Pilar de Mojos/," Boletín de la Sociedad Geografíca de La Paz, Bolivia, 1898, p. 132. According to Nordenskiöld.

72. Nord. 2, p. 3.

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C /17 cont./
343 mention the existence of such storehouses among these Indians,
● 171 and thus we must suppose that the Churupí adopted this style
of house construction only recently and probably from the
C Matako, with whom they have many contacts. /18/ To com-
343 plete the data on the spread of houses built on posts, I shall
171 also mention my observations on my expeditions of 1901 and
Go 1910 to the Guató (73). Inside many houses, under the roof
342 [352] [114] C Go [113] and using long horizontal poles, these Indians build a platform
which serves for storing various things. In this special arrange-
Go [182] ment of the Guató in building their houses, we find the rudiment
of the true houses built on posts, and this is motivated by the
great floods to which they were exposed even when they had
been built in places higher than the marshy lands.

C We should not consider houses built on posts as a product
343 of the primordial culture of the Chaco tribes. It leaves as
174 the only center of its propogation the zone in the interior
of the South American continent which we have mentioned, the
center of the ancient culture of the Aruaco /Arawak/ of these
Ce regions, the territory of the Mojo. The Chané, who were later
343 subjugated by the Chiriguano and incorporated into their com-
174 munity, also belonged to this Aruaco culture. We must thus
171 surmise that houses built on posts, like those we still find today
among the Chiriguano and some of the Chané, first originated in
the Chané culture and later passed to the Chiriguano when
the cultures of these two tribes were fused into a single one.

C Ce No doubt the special construction of these storehouses has
343 a different purpose today among the Chiriguano and the Chané
[182] than it had in the beginning. According to Nordenskiöld, the
Chané of the lower Parapití River, which is a typically
marshy region, do not have such houses, while they are
common among the Chiriguano and also among the former
000 who live on solid ground not exposed to floods. Their purpose

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73. Max Schmidt: Indianerstudien in Zentralbrasilien /Indian Studies in Central Brazil/, Berlin, 1904, p. 178.

C
Ce
343 /18 cont./ Their purpose
182 today among the Chiriguano and Chané, as well as among
171 the Matako and Churupí, is primarily to protect certain pro-
231 visions against the numerous dogs and other domestic animals
who are around in great number in every part of the town (74).

74. Concerning the question of the purpose of houses built upon posts with respect to damage by animals, cf. v. Rosen, op. cit., pp. 192-198.

C
Ce
433 Food and Drink. Manner of Eating and Drinking.

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226 Hunting and fishing are not very important in the economy of the Chiriguano and Chané. Their territory has relatively few edible animals, and they are not very brave hunters (75).

75. Nord. 2, p. XVI.

C
Ce
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262 Of animals that can be hunted, they eat the puma and the jaguar, while they scorn vultures, foxes, and the meat of monkeys, so craved by other Indians (76). One contribution

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76. Nord. 1, p. 190.

to their subsistence which is worth mentioning is that from fishing, but only for the Chiriguano and Chané who live near the upper Pilcomayo River, since that river has excellent fishing. These Indians cannot make much use of fishing in the Rio Grande, because today this river can be held to be almost the frontier of their territory. The Parapití River has many fish, but they are very small. While the Chané today live in territories where for several months some fish are available, many Chiriguano towns are so far from the larger streams that fish
000 does not enter into the diet of their inhabitants (77). With

77. Nord. 2, pp. XV and XVI.

/19 cont./

C 415 As Figure 18, a and b, shows, these wooden dishes have two handles on the rim.

C Ce 412 [177] [439] As an eating utensil the Chiriguano and Chané today use metal spoons which are acquired from the whites. But they also use wooden spoons (85).

C 412 /20/ Wooden Spoons (kuruha) of the Chiriguano

I. A. 353. (Gift of Doña María F. de Casati.) Length 36 cm.
I. A. 498. (Max Schmidt trip.) Length 42.5 cm. (Fig. 20).
I. A. 499. (" " ") Length 16 cm. (Fig. 22).

As Figures 20 and 22 show, there are variations in the shape of these wooden spoons. C [171] The shape of spoon I. A. 499 is almost exactly like the Chané spoon shown in a drawing by Nordenskiöld (86), while the shape of spoon I. A. 498 is very similar to the spoons found in the ancient burials of the Peruvian highland, their front part and handle forming a rather straight line.

C Ce [113] 85. Nord. 2, p. 56. Nordenskiöld, Erland: Vergleichende ethnographische Forschungen I. Eine Geographische und ethnographische Analyse der materiellen Kultur zweier Indianerstämme in el Gran Chaco /Comparative Ethnographic Investigation I. A Geographic and Ethnographic Analysis of the Material Culture of Two Indian Tribes in the Gran Chaco/, Göteborg, 1918, p. 93. (Cited in what follows: Nord. 3.) Métraux I, pp. 364, 374-376, and Figs. 42 and 43.

86. Nord. 3, p. 93. Fig. 24 F.

/22 cont./

352 The Chiriguano generally sleeps on a kind of cot (*catre*),
513 that is, a bed frame made of cane. Such beds, which in
[251] addition to their own purpose also serve for drying maize, have
been represented in drawings by Eric v. Rosen (95), Erland
[174] [178] v. Nordenskiöld (96), and Métraux (97). No doubt /23/ the
cold climate of the region to which the Chiriguano had emigrated made them abandon the use of the hammock for sleeping, not very practical for such a climate, and replace it with
the cot, which was already common among the tribes of those
[232] regions. Lacking a cot, the Chiriguano sleep on the ground.
[824] In that case they use for a bed large mats made of cane or palm
[126] leaves, or also hides (98). I acquired from the Chiriguano one
[824] such mat plaited out of palm leaves (Fig. 95).

Chiriguano Mat (*túpa*) in the Collection

I. A. 540. Length 1.75 m. Width 1.50 m. (Fig. 95).

352 In some Chiriguano houses I also saw wooden benches
17 (*apika*), but unfortunately I could not acquire a specimen.
[126] Those benches in the form of a sled are very similar to the
kind of benches that are very common among the Indians of
Brazil (99) and those that we also know from the ancient

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95. Eric v. Rosen, *op. cit.*, p. 190.

96. Nord. 2, Fig. 2.

97. Métraux 1, Fig. 125, p. 470.

98. Nord. 1, p. 177. V. Rosen, *op. cit.*, p. 200. Métraux 1, p. 470.

[113] 99. Cariy /*sic*/ von den Steinen: *Unter den*

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C
/23 cont./

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●171
[113] Naturvölkern Zentralbrasiliens /Among the Primitive Peoples of Central Brazil/, Berlin, 1894, p. 286.

Peruvians (100). Nordenskiöld and Métraux show such

C
[113] 100. Max Schmidt: Kunst und Kultur von Peru /Art and Culture of Peru/, Berlin, 1929, p. 436.

Chiriguano benches in drawings (101).

101. Nord. 1, Fig. 85. Métraux 1, pp. 471 and 472 and Fig. 129.

C
Ce

Painting and Deformations of the Body

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302
178 As the use of clothing has increased among the Chiriguano and Chané, the custom of painting or tattooing the body has naturally lost importance and the remnants of such customs are too few to be able to say what they were in the past. Nor
C
Ce
302 do we have data on this. I often saw Chiriguano and Izozó women and girls paint themselves with urucú, making colored spots on their faces. According to Nordenskiöld, men and women sometimes paint their faces, as well as their bodies,
C
302 with red paint (102). Nordenskiöld also found tattooing on

102. Nord. 1, p. 203.

the arms of some women and one Chiriguano man (103). The

103. Nord 1, p. 203. Nord. 2, p. 83, Fig. 27.

custom of dyeing the teeth with dark blue was found by

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Izozo

Ce 301 302 /27 cont./
Nordenskiöld shows in a photograph a Chané man with such a band (120). According to information in the Annuae litterae Societatis Jesu of the year 1605, the Chiriguano men previously wore a tonsure like that of the Guaraní in Paraguay and the Tupinambá on the Brazilian coast: "Coronis in modum nostrorum sacerdotum utuntur" /coronal in the style of our priest/ (121).

C 302 •171

120. Nord. 1, Plate 20.

121. Métraux I, p. 467.

Ce 301

Men's Hair Bands

I. A. 653-660. (Izozó), woven of cotton. (Fig. 30: I. A. 660, 653, 655, 656.)

The average length of these men's hair bands measures about one meter. The longest is 1.18 meters and the smallest 0.91 meters. Although the length of all of these bands is almost the same, there are quite big differences in their width, the width varying between 1 cm. and 3.3 cm. The narrowest of these bands were woven plain, without decorations, and are in part white, in part later dyed with blue, red, or blue-gray dye. The two widest bands, 3.0 and 3.3 cm. wide, respectively, show simple ornamentation produced by the weaving. I shall deal with the details of the technique of this weaving and its ornamentation in the chapters on weaving and art.

Beside these bands woven out of cotton, the Izozó have men's hair bands which are longer and wider and woven out of human hair, ending in fringes at the two ends.

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/28/

Combs (kívua) in the Collection

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[126]

I. A. 740. (Found on the road between Capirenda and Garrapatal. Length 9.5 cm. Width 9 cm. (Fig. 29a.)
I. A. 1327. Izozó. Length 7.5 cm. Width 3.5 cm. (Fig. 29b.)

The two combs in the collection, coming from the Izozó, represent two completely different types of comb. To the first type belongs the comb I. A. 740, which is made up of some little wooden sticks held together between two transverse pieces of cane interwoven with threads. (Cf. Fig. 29a.) The comb of the second type, I. A. 1327, has simply been carved from a single piece of flat wood. (Cf. Fig. 29b.) A comb similar to I. A. 740, coming from the Chané, is shown by Nordenskiöld in a drawing (122). The three Chiriguano combs shown in a drawing by Nordenskiöld (122) /see footnote 122 above/ belong to the second type and have been carved from wood, like the Izozó comb I. A. 1327. But in contrast to this one, the upper parts of their backs have been carved. Likewise the Chiriguano combs shown in drawings by v. Rosen and Métraux (123) are decorated with such carving.

C
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322

C
Ce
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322

Up to now there has been some doubt as to how these two different types of combs might be distributed among the Chané and the Chiriguano. According to Nordenskiöld (124), the Chiriguano only have combs carved from a single piece of wood, and the Chané commonly have the type of comb with small sticks and rarely the simple comb carved from wood.

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122. Nord. 1, Fig. 109.

123. V. Rosen, op. cit., Fig. 196.
Métraux I, Plate 87.

124. Nord. 2, p. 81.

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Izozo

/28 cont./

C
Ce
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V. Rosen and Métraux found among the Chiriguano combs made of little sticks (125), and, as already mentioned, I obtained these two types of comb from the Izozó. According to this, I believe that we must decide the question of the manner by which the two types of comb appear simultaneously among the Chiriguano and among the Chané, but noting first that among the latter the comb made of little sticks is more common and among the former the wooden comb is more common.

Because the diffusion of simple combs carved from wood, like those that the Chiriguano and the Izozó-Chané have, is relatively restricted among the other tribes of South American natives, while this type of comb was known to the ancient Peruvian culture, we must also include this cultural possession among the ancient Peruvian influences (126). The combs fitted with little sticks, which we know from the Chané and the Chané-Izozó, are different from such combs used by most of the Chaco tribes, for example, by the Churupí /Chulupi/ and the Maká /Maca/, not only with respect to its material but also with respect to its method of manufacture. But I do not accept Nordenskiöld's opinion, according to which those Chané combs are different, in that they are only usable on one side, from those of the Chaco tribes, which were usable from both sides (127). The Chaco Indian combs furnished with little sticks that I am familiar with are also used only on one side for combing, inasmuch as the other side is the handle. We can be quite sure of that because the little sticks of cane that form the teeth of the comb are pointed at only one end. The

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125. V. Rosen, op. cit., p. 202. Métraux I, pp. 467 and 468 and Fig. 123.

126. Nord. 2, p. 81.

127. Nord. 1, p. 204. Métraux I, p. 467.

Ce 322 412 171 /28 cont./ The main difference between the Chané combs and the combs of the Chaco tribes is that the teeth of the latter are made of little sticks of cane, and the teeth of the former, of little sticks of Ce 322 412 any other kind of wood. The /29/ wooden teeth of the Izozó comb in our collection are between two flat little sticks of cane vertical to them, and on the handle end, between the little sticks whose lower parts form the teeth, shorter little sticks have been inserted, so that at the lower part of the Ce [284] comb there is a certain distance between the teeth. The lacing, consisting of cotton threads, covers the upper part of the comb as far as the edge, but also slightly covers the lower part which forms the teeth. The lacing is not secured with wax.

C Ce 302 824 With respect to hair care, we still must mention the data of Nordenskiöld and of Métraux (127) /see footnote 127 above/ to the effect that the Chiriguano and some of the Chané rub their hair with "Nyantéra" seed ("ñitira," according to Métraux), and the Chané of the Parapití with the rind of the mistol /Zizyphus mistol/, "yuag."

C Ce 302 178 [171] From Father Lizárraga's description (128), we know that the Chiriguano and Chané in the past plucked out the hairs of the body, except from the head, as do most of the Indians of South America. Father Lazarraga /sic/ says that the Chiriguano plucked out their eyebrows and eyelashes. This custom does not exist today, and the photographs of nude Chiriguano men shown by Lehmann-Nitsche (129) show that today as a general rule they do not remove hair from the pubic regions. Also one meets today some middle-aged men who have mustaches, such as the cacique of the Izozó shown in Figure 10 and some of the Chiriguano men shown in drawings by Lehmann-Nitsche (130).

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128. Moreno II, p. 101.

129. Lehmann-Nitsche, op. cit., Fig.

130. Lehmann-Nitsche, op. cit., Plates VIII-X.

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/29 cont./
Because of this change the implement for plucking hair, consisting of small tweezers, formerly very common, has naturally lost a great part of its importance today, and similarly, in its transformed state as a chest ornament, it is rarer. I found such tweezers among the Mataco and the Churupí. Unfortunately I did not succeed in acquiring such tweezers or the corresponding chest ornament, called "boivera" also by the Chiriguano. Nordenskiöld describes these tweezers in detail (131),

131. Nord. 2, pp. 81 and 82.

and he adds that the Chiriguano also use small sticks of cane to pluck out hair.

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The form of these tweezers made of metal corresponds to that of the tweezers known through finds made in the burials of the ancient Peruvians. Today these tweezers are normally made of any piece of tin plate or sheet iron, which, when provided with a cord, they use for chest ornaments, besides their original purpose. This custom of using tweezers as a chest ornament was very common among the ancient Peruvians. Among the latter's necklaces there are many that, apart from other things, consist of silver tweezers. It was customary among the ancient Peruvians that these enlarged tweezers, unsuitable for their original purpose, be transformed into a pure and distinctive ornament. The Museum of Ethnography in Berlin has such ornaments in the form of depilatory tweezers, made of copper, silver, or gold, in great number, one example of which is 52 centimeters in length (132). Therefore I suppose

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132. Cf. Max Schmidt: Kunst und Kultur von Peru, Berlin, 1929, pp. 83, 369, 397, and 399.

we must deduce that the Chiriguano custom of using as a chest ornament a silver ornament in the form of one of those tweezers is due to ancient Peruvian influence. There are several specimens of the "boiveras," now rare and doubtless most of the time carefully kept from the view of the whites, in

/29 cont./

301 [439] European museums. These are not made by the Chiriguano themselves, but by their mestizo neighbors and sold to the Indians. The external form is still that of tweezers, much enlarged. But the *boivera* of today, discounting its size, also cannot be used for plucking hair because the two parts /30/ of its lower edge have been soldered. The fact that the decoration of the surface is not still primordial is explained by the fact that the Chiriguano are not the makers of these ornaments.

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Clothing and Adornment

From the 16th century we have the brief description of the Chiriguano by Bishop Lizarraga (133) where, among other things, it is said: "They go about naked or at the most sometimes have a short shirt /*camisatilla*/ down to the navel." We can assume that this statement by the Bishop as of that time refers only to the Chiriguano men, because it is likely that by the time of their immigration the Chiriguano women were wearing a garment which covered their genital organs, as we know the Guaraní women of the ancient Province of Uruguay did (134). It is likely that this garment had the same form as the "*tipoy*," which is a garment in the form of a poncho without sewing and which even today is very common among Chiriguano and Chané women, as well as among various other Indian tribes of South America.

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[113] 133. Lizarraga: "Descripción et población de las Indias /Description and population of the Indies/." In Moreno II, p. 101.

134. Serrano, *op. cit.*, pp. 123 and 124.

Chane SF8
Izozo

C 301 [126] /33 cont./

Ring (moãkaregua) in the Collection

I.A. 1321. (Chiriguano.) Gift of Father Ayala Solis. Diam. 2cm.

Finally I shall mention here a ring obtained by Father Ayala Solis from the Chiriguano and donated by him to the Museo de Historia y Etnografía del Paraguay. The ring was made of metal from a cartridge shell.

Ce 291 The cacique of the Izozó shown in Figure 12 wears sandals (Chir.: mbipása. Izozó: p[illegible]apá). Generally the men and women go around barefoot. But both sexes use sandals if they are to walk on stony or thorny ground (146).

146. Nord. 1, p. 203. Nord. 2, p. 69, Fig. 23. V. Rosen, op. cit., p. 207.

C 291 17 The region of distribution of the sandal in South America leads us to assume that the Chiriguano did not first receive this item from the whites, but earlier, and that it came from the culture of the ancient Peruvians (147).

147. Cf. Nord. 2, p. 69.

Treatment of Illnesses and Burial

Ce 743 Ce [114] C [114] C Ce 756 ●171 In the Indian settlement in Toledo there was arranged a small hospital in which the sick Izozó were receiving medical treatment. For that reason I did not have the chance to make investigations among them about the native treatment of the illnesses of these Indians. Nor did I have the chance to make such investigations in Machareti. Therefore, I refer to the investigations /34/ Nordenskiöld and Métraux made on this subject (148), and I wish only to

148. Nord. 1, pp. 216 and 217. Métraux 1, pp. 480-488.

mention here that among the Chiriguano and Chané, as among

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Ce /34 cont./
756 most other Indians of South America, there is a professional
171 physician who is charged with the treatment of the sick, this
treatment in most cases consisting of sorcery among these
C Indians too. The physician attempts to dispel the evil by
Ce sucking out foreign objects which have penetrated the body of
755 the bewitched sick person. In addition to such treatment,
757 remedies are used among the Chiriguano and Chané, which,
[824] in addition to those made of plant substances, include the
[237] fat of various animals applied externally for different illnesses.
Ce The Chané treat wounds with boiling water.
752

C Burial among the Chiriguano and Chané who live outside
Ce the missions is generally still done in urns, according to
764 primordial custom. According to Nordenskiöld (149), the
415 large pots in which chicha is prepared are also used as funeral
urns, and another pot is used to close the urn. Often the dying
person, even before being completely dead, or soon after
death, is crammed into the urn in a squatting position. A
C calabash of water is placed with the dead person in the urn,
Ce which is buried within the house. Commonly the house, after
768 the burial, is abandoned for some time, but is occupied again
C later. Such a funeral urn of the Chiriguano of the Caipipendi
764 Valley is shown in a drawing by Erland Nordenskiöld (150).
415 Up to half of the urn, which is provided with a cover, is disenterred. Nordenskiöld's statement that the Chiriguano use the same pots which serve for the preparation of meals as funeral urns is significant. From that we can deduce that a funeral urn found in other regions might also have served, during the lifetime of the dead person buried in it, some other purpose related to the economy of those Indians.

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149. Nord. 1, p. 208.

150. Nord. 1, Fig. 113.

/35 cont./

526 Nordenskiöld did not see the Chiriguano of the Sierra play the game in which the ball is hit with the head, but he did hear it said that formerly they had played this game, called "bondi" by them, and that, like the Chané, they had
526 ● 171 used solid rubber balls (153). In my work published in this journal (154). I have already mentioned that, according to the Litterae Annuae of 1589 (155), the game with a ball hit with the head was also played by the Itatines-Guarayûs and undoubtedly with a hollow rubber ball, because it is described there as being very light. In 1791 Eder (156) mentions this game with a ball hit with the head for the Moxos /Mojo/, who not only used white, hollow rubber balls, but also used dark, solid ones. Several authors, older ones, and more recent ones, for example, Fernandez and de Orbigny, mention this game among the Chiquito (157). Nordenskiöld on his travels saw it played in addition to the Chané, by the Huari (158).

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153. Nord. 2, p. 104.

[113] 154. Revista de la Sociedad Cientifica del Paraguay, Vol. III, No. 6, pp. 116 and 117.

155. Page 434. According to Nordenskiöld.

[113] 156. Eder, Franc. Xav.: Descriptio provinciae Moxitarum /Description of the province of the Mojo/, 1791, p. 41. Cited in Nordenskiöld.

157. Nord. 2, p. 104.

158. Nord. 2, p. 104.

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CC /35 cont./

526 According to these data concerning the region of spread
174 of the game with a ball hit with the head, we must assume
177 that the Chané, even before their subjugation by the Chiriguano,
must have known this game, and that the Chiriguano of /36/
the Cordillera, like the Itatines-Guarayú, received it earlier
C from the Chané. The Chiriguano also play the game with a
526 ball made of maize leaves struck with the hand, which we
● [171] know from many other South American Indians (159). According to Métraux, this game is not played except at the time when the maize is ripening, and it is related to the cultivation of maize.

159. Nord. 1, p. 168. Métraux 1, p. 44 and Fig. 11.

With respect to other games of movement, the Chiriguano
children play a game which corresponds to the game of polo
C and is very common among the Chaco tribes. The Chiriguano
[171] call it "taca." The ball is struck either, as among the Chorote
and the Churupí, with curved sticks or with a primitive
C [177] racket (160). No doubt the Chiriguano received this game from neighboring Chaco tribes.

160. See Nord. 1, p. 193.

Of the games of skill, only one is played by adults and
Ce this only by women. It is a kind of bowling game that the
[526] Chiriguano in Tihuipa call "itarapóa" and the Chané of the
Parapití "tecoróre" (161). The bowling pins in this game consist of two rows of maize kernels, two by two, one on top of the other, or on a cob. They throw with stone balls or with a hollow ball of baked clay with little pellets of the same material inside (162).

161. According to Nord. 1, p. 192.

162. Nord. 1, p. 192 and Fig. 99.

/36 cont./

C 524 177 The small sling I. A. 507, made out of a small forked stick, two strips of rubber obtained from an automobile tire, and leather, is not of native origin, nor is the rattle shown in Fig. 35a. /Plates XII-XIII appear here./

C 524 857 /37/ The toy shown in Figure 36a, called mou-mou by the Chiriguano, is made of a small gourd disk with a toothed edge and a double string. The latter passes through two holes in the disk. By alternately twisting and stretching this string, a rapid rotation of the disk is produced, together with a humming noise. Among other Chané children's toys there Ce [524] [857] are shown in drawings by Nordenskiöld a hoop with a rope, a musical instrument consisting of two bows (167), and a

167. Nord. 1, Fig. 104. C and D.

C [171] small musket. The Chiriguano children in the Caipipendi valley and those of the Chorote also play with such muskets (168).

168. Nord. 1, Fig. 23.

C 524 Among the games of skill we must mention, finally, the string games, some of which are shown in sketches by Métraux, which a Chiriguano man made for him (169). The

169. Métraux I, pp. 443, 446. Plates 89 and 90.

Chiriguano children also know this game.

C Ce 524 There are two games of chance among the Chiriguano and the Chané. One, called "chúcaráy" by the Chiriguano and "chunquanty" by the Chané, is played with four small boards, and the other, called "anúcarete," with a large number of boards, concave on one side and convex on the other (170).

170. Nord. 1, p. 191 and Fig. 95.

/39 cont./

Ce 231 Tamed wild animals are rarely found inside their houses, except that they do have some parrots (182) /see footnote 182 above/.

Hunting

Ce 224 [433] [411] [459] We have explained before that, because of the lack of animals that can be eaten in the territory of the Chiriguano and Chané, hunting is secondary among their means of subsistence, and in accordance with this we know through old documents that the feathers for their arrows were introduced to the Chiriguano by other Indian tribes who were their tributaries (183). Ce [231] The raising of domestic livestock gives them a greater opportunity to obtain animal foodstuffs. C 224 In accordance with the fact that the Chiriguano, at least today, are not first-class hunters, the most common method of hunting among them is the use of traps (184). C 223 Nordenskiöld describes three different kinds of traps, all three of which are used for catching birds (185). The first kind consists of a simple noose and is used with the help of calls. C [171] The second kind, which is common among various other tribes of Indians, is used, for example, also by the Kaingua /Caingua/. The third kind consists of a net made in two parts and fixed to the ground by means of stakes. Ce [973] [223] In one of the Chané legends recorded by Nordenskiöld, a trap for catching doves is mentioned (186).

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183. Moreno II, 121.

184. V. Rosen, op. cit., p. 205.

185. Nord. 2, pp. 32, 33, and 85, Fig. 10, 12, and 13.

186. Nord. 1, p. 273.

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points, one Izozó specimen reaches a length of 1.07 m., and a Chiriguano specimen, a length of 1 m. This is the opposite of the observations that v. Rosen made about Chiriguano arrows, that they were as large or even larger than the bows.

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Without counting the Chiriguano arrows fitted with wire points, which no doubt are used only by children for shooting at fish or birds and which are often made with wooden shafts, arrow shafts are universally made of cane, taken from the plant Arundo donax, which, as I have already mentioned above, is cultivated by the Chané of the Parapití River. According to Nordenskiöld, the Chané formerly also used the Ubá (Cynnerium sp.), which they call "chuchio" (188). The arrows collected among the Izozó are provided with iron points. Nordenskiöld also shows in drawings Chané arrows fitted with wooden points in the form of a lancet or dentate (189).

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Among the Chiriguano arrows in the collection, there are two fitted with iron points, one fitted with a dentate wooden point, one such wooden point without a shaft, and two arrows for bird hunting that are fitted with a club instead of a point. The Chiriguano arrows fitted with iron points correspond throughout to the Izozó ones with respect to form and material.

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The iron point is joined to the shaft by means of a piece of split wood and a wrapping of cord made from special tree bark and fastened with wax. The lower end of the cane shaft has a groove over which the end of the arrow is also fastened by a wrapping of the same cord secured with wax.

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/42/ Some Chiriguano and Izozó arrows have feathering, others do not. While the feathering was lost on some of the arrows that do not have it now, as can be discerned from the remnants of wax which had served for attaching it, other arrows show clearly that they never had feathering.

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If there is feathering, the feather parts attached by means of wrapping with cord and they are small, as are those of most of the Chaco tribes.

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188. Nord. 2, p. 56.

189. Nord. 2, Fig. 6, A and C.

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Macana in the Collection

411 [126] I. A. 517. (Chiriguano.) Length 64 cm. (Fig. 38).

● [191] The wooden macana, acquired from the Chiriguano, is provided at its upper end with a broadening distinctly delimited from the handle (cf. Fig. 38) and in that respect corresponds to the macanas that we know from various Chaco tribes, for example, the Toba, but it does not correspond to the Chiriguano macana shown in a drawing by Nordenskiöld (197).

197. Nord. 7, Fig. 9.

The latter is about the same length, but it does not show the clear broadening at the handle, its upper end being only slightly broader. According to Nordenskiöld, the Chiriguano [224] do not use these macanas except for hunting pigs (198).

198. Nord. 1, p. 183.

[126] Slings (tamomboka) in the Collection

I. A. 508. Chiriguano. Length of the middle part of net 15 cm.
I. A. 509. " " " " " " 14 cm. (Fig. 36b.)

The two slings acquired from the Chiriguano seem to be [286] exactly alike. They consist of a middle part made with the net technique with caraguata-fiber string which terminates at [224] each end with a cord. One of these two cords ends in a simple knot and the other in a small loop. These slings are like the Chané ones shown in drawings by Nordenskiöld, while the manufacture of the middle part of the Chiriguano sling shown by Nordenskiöld is different (199). The Chiriguano in contact

199. Nord. 7, Fig. 7, A.

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/44 cont./The also fish with hooks, which today they obtain from the whites. But it may be that the hook is an implement of their ancient culture (208). In

208. Nord. 2, p. 44.

addition, they fish by means of deep nets like those of the neighboring Chaco tribes, such as the Chorote, the Churupí, the Matako, and the Toba (209). They also fish with arrows

209. Nord. 2, p. 43. Métraux I, p. 350, Fig. 80.

and formerly with spears with two points. On his trip in 1901-1902, v. Rosen acquired one specimen of these spears from the Chiriguano, which he has described and shown in a sketch (210).

210. V. Rosen, op. cit., p. 214 and Fig. 216.

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Among the Chiriguano and Chané arrows specifically for fishing, we must distinguish two different kinds, one for larger fish, with two dentate wooden points (211), and the other for

211. Nord. 2, Fig. 15b. V. Rosen, op. cit., Figs. 213 and 214.

small fish, provided at the upper end of the shaft with a large number of cactus spines (212).

212. Nord. 2, Fig. 15a.

Ce 415 /51 cont./ These vessels have a globular form and are provided with a handle. The bottom of three of them is clearly distinct from the belly, forming a foot. Ce [531] Two of them have designs on the surface; the others are without designs.

C 415 [126]

8. Vessels Used as Receptacles for Food, from the Collection

I. A. 394. Chiriguano. Height 17.5 cm. Aperture 44 cm.
I. A. 401. " " 11.5 cm. " 30 cm.

C [264] Two of the baked clay dishes that I obtained from the Chiriguano in Machareti seem to me to be too big to be considered as dishes for eating, because Nordenskiöld states that (228) the Chiriguano do not eat from a common dish, but rather each one has his own separate dish. We can assume that these are vessels used as food containers or serving dishes for food before it is placed on the individual dishes.

C [531] The two dishes are without designs. The flat bottom is well distinguished from the wall, which widens upward. The dish I. A. 401 has a rather wide rim which has two handles. Cf. Fig. 53b /see p. 118/.

C Ce 415 [171]

9. Vessels Used for Storing Objects

In contrast to the other Indians, the Chiriguano and Chané use vessels for keeping anything of value. I did not receive from the Indians any indication /52/ that any of the vessels I brought from them belonged particularly to this type. Therefore I refer here to a vessel shown in a drawing by Nordenskiöld with the caption "For keeping knicknacks in" /cited in English/ (229).

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228. Nord. 1, p. 190.

229. Nord. 2, p. 158 and Fig. 45, N. 19.

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Grinding the Raw Materials

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For grinding raw materials, principally for grinding corn, the Chiriguano and Chané use large wooden mortars with long pestles (255). Such a wooden mortar is shown in Figure 15 and another one by Nordenskiöld (256). Stone mills are not used by these Indians, although this implement was used, except for the Chaco tribes, by all the tribes whom the Chiriguano had as neighbors after their migration to the west. According to Métraux, a small stone mill is used only for grinding the seeds of a plant which the Chiriguano use as soap for washing their hair. Such a stone mill is shown in a drawing by Métraux (257).

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Because the wooden mortar is common even today among the Kainguá /Caingua/, who also belong to the Guaraní linguistic group, and is also mentioned for the ancient Tupinambá /Tupinamba/ of the eastern coast of Brazil, we can assume that the Chiriguano brought this cultural possession from their native land.

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The fact that mandioca is not important in the economy of these Indians explains why they do not use the wooden grater, the application of which is diffused among so many other Indian tribes of South America who cultivate this nourishing root.

Making Cord and Thread

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The thread that the Chiriguano and Chané make out of wool or cotton is spun by means of the spindle, while that made of caraguata is twisted by hand. We have no information on the way this caraguata thread is twisted.

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255. Nord. 1, p. 51. Métraux 1, p. 365, Fig. 30.

256. Nord. 1, Fig. 116.

257. Métraux I, p. 467, Fig. 122.

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I.A. 711. (Fig. 90g)	Spindle	(Izozó).	Lgth.	36.2 cm.	Clay	whorl,	dia.	4.3 cm.
I.A. 712.	"	"	"	33.5 cm.	"	"	"	4.2 cm.
I.A. 713. (Fig. 90h)	"	"	"	43.5 cm.	"	"	"	4.2 cm.
I.A. 714.	"	"	"	46 cm.	"	"	"	4 cm.
I.A. 715.	"	"	"	43.5 cm.	"	"	"	3.8 cm.
I.A. 716. (Fig. 85c)	"	"	"	41 cm.	"	"	"	3.8 cm.
I.A. 717.	"	"	"	42.5 cm.	"	"	"	3.5 cm.
I.A. 718.	"	"	"	36 cm.	"	"	"	3.3 cm.
I.A. 719.	"	"	"	36.5 cm.	"	"	"	3.7 cm.
I.A. 720. (Fig. 90f)	"	"	"	41.2 cm.	"	"	"	4.4 cm.
I.A. 721. (Fig. 90d)	"	"	"	34.5 cm.	"	"	"	3.7 cm.
I.A. 722. (Fig. 90e)	"	"	"	38.5 cm.	"	"	"	3.3 cm.
I.A. 723.	"	"	"	40.5 cm.	"	"	"	2.5 cm.
I.A. 724. (Figs. 85a and 90a)	"	"	"	51 cm.	"	"	"	4 cm.

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The spindles that I obtained from the Chiriguano and Izozó are the type of spindle, very common among the Indians of South America, that Nordenskiöld calls "Bakairí type" in contrast to the "Bororo type," this nomenclature being based on the first description of these two types of spindles by Carl von den Steinen, who found them among the Bakairí /Bacairi/ on the one hand and among the Bororó on the other (258). In contrast with the

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258. Carl von den Steinen. *Unter den Naturvölkern Zentral-Brasiliens* /Among the Primitive Peoples of Central Brazil/, Berlin, 1894, pp. 238 and 488. Nord. 2, p. 196. Otto Frödin and Erland Nordenskiöld. *Zwirnen und Spinnen bei Indianern Südamerikas* /Twining and

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Spinning among South American Indians/,
Göteborg, 1910.

"Bororo type," the "Bacairí type" of spindle is held in a vertical position when used for spinning and has a small enlargement in the form of a knob at the upper end of the stick. In spinning, the prepared thread winds around the upper piece of the stick. The material of the Chiriguano and Izozó whorls is baked clay (that of the Chiriguano, pieces of broken baked clay vessels, filed), wood, or, rarely, among the Chiriguano, stone.

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From the measurements mentioned above, it seems that the Chiriguano whorls usually have a rather larger diameter than the spindle whorls of the Izozó. The longest stick in the collection (from the Izozó) measures 54.5 cm.; the shortest (from the Chiriguano), 25.5 cm.

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As I have already mentioned, all the sticks of the Chiriguano and Izozó spindles are fitted at the upper end with an enlargement in the form of a knob. Most of the spindle sticks in addition have an enlargement in the lower part, directly under the place where the whorl is put, so as to prevent the whorl from coming down the stick when the spindle is in a vertical position. Many spindles have a wrapping of cotton or raw wool directly under the whorl in order to make the whorl secure.

The form of the whorls shows many variations. I have already mentioned that the Chiriguano whorls are generally larger than those of the Izozó. They are also more uniform. The two sides of the baked clay of the Chiriguano are simply flat and smooth, which results from their origin as pieces of broken baked clay vessels to which the Chiriguano give the form of a disk by filing them and which they perforate in the center. The stone whorls of the Chiriguano /60/ and most of the wooden whorls also show the same form. But among the latter there are also some (cf. Fig. 87 /see p. 147/) which are similar to the more complicated forms of the Izozó whorls, although they differ from the latter in their greater size.

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Among the Izozó whorls only two have two flat sides like the Chiriguano whorls. The other Izozó whorls, not only those of baked clay but also the wooden ones, show great variation in

Chane SF8
Izozo
Paressi SP19

Ce /60 cont./

283 form, many of them being similar in form to the whorls of the
171 ancient Peruvians. Cf. Figures 89 and 90 /see p. 147/.

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The Technique of Plaiting

In a legend told to me by a Paressí Indian in Mato Grosso, the appearance of a new epoch is discussed. The young generation of the Parassís /Paressi/ complains to the grandfather that they have now forgotton the manufacture of the bottoms of their different baskets, that is, the beginning and thus the rudiment
C of that work. The Chiriguano can make the same complaint to
285 their grandfathers. They have also forgotten, as a result of the
178 appearance of a new era, that is, as a result of their contacts with the whites, most of the elements of the art of plaiting, and imitations of European merchandise or of the plaited objects of neighboring Indians, less cultivated than they, are only poor compensation.

C Of the four principal types into which all the plaited objects
285 of the Indians of South America can be classified with regard to
●171 their technique, which I have called in my publications which deal with them (259) "Stufengeflechte /step plaiting/, Doppelfadengeflechte /double-thread plaiting/, Rohrstuhlgeflechte /caning/, and Geflechte in Spiralwulsttechnik /plaiting in coiling technique/," only the first two can be found among the Chiriguano and the Chané-Izozó. It is surprising that the fourth type (Geflechte in Spiralwulsttechnik) of plaited objects does not exist among these Indians, because this technique was the most common one in the mountainous regions neighboring Chiriguano territory.

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259. Max Schmidt, Lehrbuch der Völkerkunde /Textbook for Ethnology/, Berlin, 1924, pp. 154-157.

C /62 cont./
285 The technique of the small bag I. A. 512, which has a
177 cover and corresponds in form to a modern cigar case, is of no
interest to us, because this is a product of modern manufacture.

C Baskets I. A. 551 (of the Chiriguano) and I. A. 677 (of the
Ce Izozó) are of special interest because they represent the product
285 of a new era in which the primordial devices of the technique
178 have been forgotten and therefore they have lost the typical
C forms of the products of those techniques. The making of this
285 type of basket, which is widespread among the Indian tribes of
● 171 South America, begins with the making of the bottom and ends
at the upper edge of the basket where the free ends of the strips
are /63/ fastened. If we compare the structure of the bottom
of these Chiriguano baskets with the structure of corresponding
baskets of other tribes of South American Indians, such as with
the structure of the baskets of the Bacairí on the tributaries of
the Xingú River (Mato Grosso, Brazil) or of the tribes of the
Rio Negro, our attention is drawn to the great difference with
C respect to the conformity of the work. In my above-mentioned
285 publications (265) I have described this kind of basket in more
C
[113]
detail, and I have demonstrated that the special design which
appears in two variations on the bottom of most of the baskets
of this kind that are not yet degenerate is consistent with the
technique, because only a bottom decorated in this way can be
a proper beginning in order to form the walls of the basket.
Moreover, there is the difficulty that for the fabrication of the
four walls of one of these baskets one needs twice as many strips
as the number of the free ends which come out of the plaited
square or rectangle which forms the bottom of the basket.
C Therefore, the Indians who still know exactly how to plait
Ce these baskets plait in the beginning a flat rectangular piece
285 twice as large as the projected bottom of the basket. Then
the four edges of this rectangle are folded upward, in this

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265. Max Schmidt: *Indianerstudien, loc. cit.*; and *Die technischen Veraussetzungen*, pp. 157 and 158.

Chane SF8
Izozo

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/64 cont./
There may be variations in these braids according to the difference in the number of skeins plaited and the number of strips which are passed each time by one strip of the braid, as Figures 139-141 show /see p.201/. The greater the number of skeins in the braid, the more the form of one string of the braid takes on the appearance of a band. Cf. Figure 32 a and b /see p. 62/.

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[171]
To the second of the four kinds of plaited objects into which all the plaited objects of the South American Indians can be classified belong those which are plaited in such a way that one row of sticks, threads, or similar things are united so that a double thread passes the row, continuously or at certain intervals, and in such a way that the two individual threads of the double thread encircle in each rotation one or more of the little sticks or threads of the row.

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Among the objects plaited by this technique there are two Chiriguano hammocks and one Izozó saddle covering in the collection.

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Objects Plaited with Double Thread, from the Collection

I.A. 448. Hammock (Chirig.). Wool. Lgth. 2.60 m. Width 0.75 m.
(Fig. 102b and 109.)
I.A. 449. Hammock " " " 2.05 m. " 0.60 m.
(Fig. 110.)
I.A. 844. Saddle covering (Izozó) " 1.21 m. " 0.57 m.
(Fig. 103b and 129.)

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The threads of the hammocks mentioned above are made of wool and that applies not only to the warp threads but also to the double threads. The manufacture of these hammocks is explained in two schematic drawings shown in Figures 109 and 110 /see Figs. 127 and 128, p.190/. The diagram in Figures 109 /Fig. 127/ shows the place in hammock I.A. 448 where the double thread begins to pass through the row of warp threads. The arrangement of the warp threads can be explained only by the manner in which a warp of one continuous thread was made first and in the form of a sleeve, /65/ as the warp of weavings done on a loom

/65 cont./

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Wooden Hoops for Storing Possessions, in the Collection

[126]

I. A.	580.	A pair of hoops (Chiriguano).	Diameter	53 cm.	
I. A.	581.	" " " "	"	51 cm.	
I. A.	582.	" " " "	"	46 cm.	
I. A.	583.	" " " "	"	43 cm.	(Fig. 41).
I. A.	584.	One hoop "	"	48 cm.	

[285] In the Chiriguano houses in Macharete I found hanging wooden hoops, which, usually in pairs, served for storing various possessions of the Indians. The circular area of the hoops is filled in with strips of cane that are stretched across the hoop and interwoven as Figure 41 shows. The hoops are provided with strings or strips of leather in order to be hung in the houses (268).

268. See Métraux I, p. 471, Figs. 126 and 127.

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Modern Plaited Objects in the Collection

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I. A.	503.	Basket	(Chiriguano).	Diam.	18 cm.	Height	12.5 cm.
I. A.	550.	"	"	"	27 cm.	"	13 cm.
I. A.	552.	"	"	"	31 cm.	"	23 cm.
I. A.	553	Flat basket	"	"	56 cm.	"	16 cm.

/66/ I obtained from the Chiriguano some baskets whose technique is completely different from the technique of the ● [171] baskets described above. They are so similar to the baskets commonly used by the Paraguayans that we must consider them products of an absolutely modern craft, and it is not necessary 285 for us to deal with their technique. Nordenskiöld and Métraux show in sketches and describe such baskets of the Chiriguano, among which some have handles and others lids (269).

269. Nord. 2, p. 171 and Figs. 53 and 51. Métraux I, pp. 444-453, Plates 73-77.

C /70 cont./

415 286 of weaving are not secured by the weaving process itself. In order to change the piece of weaving described in the foregoing into the double bag, its two ends are folded over at the dotted lines in the diagram, with the result that points A, B, C, and D are placed on top of points A/, B/, C/, and D/. Then the edges which are placed one on top of the other (OA/, QB/, PD/, and RC/) /71/ are sewed together. The parts EILG and FKMH are doubled in the opposite direction to form the tops of the double bag.

C Ce 286 531 ●171 In accordance with the simple mechanism of the loom with which the Chiriguano and the Chané-Izozó make their textiles, the possibilities of producing variations in the ornamentation of these are very limited. The variations in ornamentation of the weavings of the Chaco tribes, such as, in particular, those of the Churupí /Chulupi/, which consist of frets, zigzags, rhombuses, and many other figures, are not found among the ornamentations of the weavings of the Chiriguano and Chané.

C Ce 286 531 [177] Because today the woven goods of these Indians, especially the fajas and the ponchos, are often woven with imported thread or, if they are woven with native wool or cotton thread, these are often dyed with imported dyes, the different colors of the ornamentation on the surface of these weavings have no ethnological importance.

The ornamentation is formed exclusively by the warp threads, due to the fact that the distance between the warp threads is much less than the distance between the wax threads, so that the meshes of the woof disappear completely under those of the warp. Because, outside of that, the formation of the divisions of the warp threads is done by a single mechanism of loops, it can consist only of raising and lowering alternately the even and odd warp threads, for which reason the ornamentation still cannot be influenced by the process of the operation of weaving itself. The structure of this kind of weaving is necessarily such that in the direction of the woof thread, thus vertical to the direction of the warp threads, a row of the meshes formed by the odd warp threads is alternated each time with a row of the meshes formed by the even warp threads. Thus

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The Technique of Making Nets

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The technique of making nets is widespread among the Chiriguano and Chané and is used to make various objects, such as fishnets, hammocks, nets for carrying burdens, bags, and slings. The material used for making these nets generally consists of threads made of caraguata fibers. In the collection there are two Chiriguano burden-carrying nets made of woolen threads and another one made of strips of cowhide.

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The common technique of making nets among the Chiriguano and the Chané is the technique called "Knotentechnik," in German, using the knot called the reef knot in English. Figure 138, a and b, shows such a "reef knot," and Figure 142 shows the technique of making nets with this "reef knot." According to Nordenskiöld (275), the Chiriguano and Chané use small rectangular boards for making their nets, like those with which we are familiar from many other tribes of South America. Unfortunately, I did not acquire such a board from the Chiriguano or from the Izozó. By continually wrapping the first board with a thread the simple loops which are shown in the diagram (Figure 142) in the upper row are formed. The thread, after having reached the other end of the board, are wrapped continuously in the opposite direction around a second board, being connected each time, with a knot, with the loops of the thread wrapped around the first board. If the thread has been looped in the manner described, until it gets to the first loop of the first row, the first board can be removed to serve in the formation of the third row of the meshes of the net, which is made in the same way as the second, but in the opposite direction. It is clear that nets made with this technique, in their simplest and least complicated form, must have a rectangular form, and this form is typical of all of the nets of the Chiriguano and Izozó, while various other South American tribes, for example, the Bakairí /Bacairi/, who formerly lived on the tributaries of the Xingú River (in Mato Grosso), make triangular nets.

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275. Nord. 3, p. 207.

C /76 cont./

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On the Cooking of Meals

252 Most of the Chiriguano and Chané utensils used /Plates
[415] XXXVI-XXXVII appear here/ /77/ for cooking meals have al-
[412] ready been mentioned in the preceding chapters, such as pots
for cooking food and for fermenting chicha, dishes with holes
in the center of the bottom for steaming maize meal, vessels
for frying /fritar/ maize, wooden mortars with their pestles,
C and sieves. For frying /fritar/ meat or fish, the Chiriguano
CE and Chané do not use the quadrangular or triangular stands
● [171] which are so common among other South American Indians,
C
CE but instead simple wooden spits (282). Also, as we have already
[412]
said, the grater for grating mandioca roots is not found among these Indians.

CE We have yet to mention two other utensils used by the
[415] Chiriguano and Chané for fixing their meals, the large wooden
[412] dish and the spatula for stirring foods or drinks when they are
boiling or fermenting.

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Large Wooden Dishes (Platters) in the Collection

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126 I.A. 574. (Chirig.) Lgth 0.83 m. Width 0.39 m. (Fig. 19.)
I.A. 575. " " 1 m. " 0.325 m.

Unfortunately I did not obtain data regarding the special use of these large wooden dishes which I acquired from the Chiriguano in Machareti. As Fig. 19 shows, these large wooden dishes are provided with the same handles as the smaller wooden dishes which serve as vessels for eating.

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282. Nord. 2, p. 55. Métraux I, p. 352 and Figure 22.

/77 cont./

C 412 126

Spatulas for Stirring Foods, Which Are in the Collection

I.A. 501.	(Chiriguano)	Length	49.5 cm.	
I.A. 502.	"	"	24.5 cm.	(Fig. 21)
I.A. 576.	"	"	114 cm.	(Fig. 20b.)
I.A. 577.	"	"	93 cm.	
I.A. 578.	"	"	62 cm.	(Fig. 20a.)
I.A. 579.	"	"	66.5 cm.	

C Ce 412 [531] [171] These wooden spatulas for stirring are used by the Chiriguano and Chané for stirring the bubbling crock of maize when it is being fermented. Some of these spatulas have decorations on their handles similar to those of the corresponding spatulas of the Guató Indians. Nordenskiöld shows in a sketch such a Chiriguano spatula with a zigzag decoration (283), and beside

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283. Nord. 2, Fig. 17 A.

it (284) another form of these utensils, from the Chiriguano,

284. Nord. 2, Fig. 17 B.

which consists of the shoulder blade of a large mammal, attached to a wooden handle (285).

285. Nord. 2, p. 55. See Métraux I, Figs. 33 and 34.

C 273

The Making of Fermented Drinks

Concerning the making of maize chicha, that is, the national drink of the Chiriguano, Nordenskiöld says the following (286):

286. Nord. 1, p. 237.

C [412] First the maize is /78/ ground up in large mortars, then sifted and boiled in large pots with water. A part of this mash,

/79 cont./

C Ce 482 171 413

We must still note that the Chiriguano and Chané transport fish in the same way as the neighboring tribes of the Chaco, by stringing them on a cord provided with a big wooden needle (295).

295. Nord. 2, p. 46.

Implements for Storing Objects

C Ce 352 353 415

Most of the objects that serve for storing things have also been mentioned in preceding chapters, such as the various kinds of baskets and the wooden hoops which are hung in the houses for storing sundry things in them. The net bag and the carrying net do not serve only for carrying, but also for storing things in them. Baked clay vessels are not only used for storing liquids, but are also used for storing many other things which have a special value or are old memorabilia of the family (296). Furthermore,

296. Nord. 1, p. 179.

C Ce [237]

they put up special hooks for hanging various things in the houses. Such a hook is shown in a drawing by Nordenskiöld (297),

297. Nord. 1, p. 177 and Fig. 86.

and Métraux shows such a hook made of a deer's leg (298).

298. Métraux I, Fig. 128.

Art

Flutes and a Whistle in the Collection

C 534 126

I.A. 491. Flute, "sereré" (Chirig.). Wood. Lgth. 17 cm. Width 2.7 cm. (Fig. 33b.)
I.A. 492. " " " " " 20 cm. Width 3.5 cm. (Fig. 33a.)
I.A. 493. Flute (Chiriguano). Cane. Length 43 cm.

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534 I. A. 494. Flute (Chiriguano). Cane. Lgth. 41 cm. (Fig. 34a.)
[126) I. A. 495. Double whistle " " " 33.5 and 7 cm. (Fig. 34b.)

[126) From the Chiriguano in Machareti I acquired two different kinds of flutes, the ones made of cane and the others made of wood. The two wooden flutes I. A. 491 and 492 (cf. Figs. 93a and 93b /see Fig. 33a and b, p. 89/) are of particular importance because of their similarity in form, and in the case of I. A. 491 of decoration as well, to a special kind of balance beam of the ancient Peruvians, and for that reason they have already been dealt with several times in ethnological literature. These two flutes are doubtless quite old specimens which perhaps had already been used by several generations. [322] They are called "sereré" by the Chiriguano, and they are of hard wood bored from one end to the other. In the middle of the upper edge of the lozenge of the apparatus, there are two small perforations . . [301] A similar flute shown in a sketch by v. Rosen (299) shows that these perforations . . serve for a string to pass through, in order that the flute may be worn as a chest ornament. 534 174 171 Nordenskiöld (300) has already called attention to the surprising resemblance between these flutes and a special form of balance beam of the ancient Peruvians. These, numerous specimens of which are known, are no doubt classified as balance beams because of the fact that on some specimens /80/ the cord which passes through the horizontal perforation and which has at one end a weight and at the other end a loop, or some such similar thing for holding the objects that are to be weighed, has been preserved. V. Rosen, describing and showing in a drawing one of these Chiriguano flutes, which is like flute I. A. 491 except that it still has the cord which passes through the two holes on the upper

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299. V. Rosen, op. cit., p. 220.

300. Nord. 3, pp. 187 and 188.

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edge, puts forward against Nordenskiöld's deductions his opinion that the ancient Peruvian objects of this form might originally have been flutes and that they might have been used only exceptionally, in the event of necessity or only secondarily, as balance beams. Among the objects of this kind in the ancient Peruvian collection of the museum in Berlin so many specimens clearly show that they are balance beams that I cannot say that I agree with this opinion by V. Rosen (301). We must agree with V. Nordenskiöld's opinion that these wooden objects used by the ancient Peruvians as balance beams may have been accepted by the Chiriguano, not as balance beams, because the Chiriguano did not have the need to weigh anything, but as flutes. We must mention that with this kind of flute, open at both ends, two different sounds can be produced, depending upon whether the lower hole is left open or is closed with the finger.

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The two Chiriguano flutes made of cane have six holes for varying the sound and one hole, at one side, for the mouth. Cf. Figure 39a /see Fig. 34a, p. 80/. Nordenskiöld, who shows such a flute in a drawing (302), is of the opinion that the Chiriguano and Chané received this kind of flute from the mestizos or whites, because such flutes provided with a hole at one side for the mouth do not exist among the other Indians of South America or among the ancient Peruvians.

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301. Cf. Max Schmidt, Kunst ünd Kultur von Peru /Art and Culture of Peru/, p. 99, fig. p. 544, N. 8-10.

302. Nord. 7, Fig. 36 A.

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The double whistle I.A. 495 consists of two pieces of cane joined together in the manner of Panpipes. In contrast to the flutes described in the preceding, the two tubes of these whistles have lips. One, which has four holes for making the sounds vary, measures 33.5 cm., and the other, which does not have such holes, is only 7 cm. long. A whistle of this kind, but not double, is shown in a drawing by Nordenskiöld (303).

303. Nord. 2, Fig. 36b.

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[171]
In addition to these musical instruments, Nordenskiöld describes a few others that he saw among the Chiriguano and Chané. Among them can also be found those round flutes which are used by many tribes of the Chaco and one of which is shown in a sketch by Nordenskiöld (304). They also have large trumpets, which the Chiriguano call "anguahuasi," while the common trumpet is called by the same name as is the mortar, "angúa" or "anguarai." One can also find trumpets made out of a cow's horn or a calabash, which are blown at the upper end (305).

304. Nord. 2, Fig. 35.

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Ee
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305. Nord. II, p. 119, Fig. 37 A and B.
Métraux I, p. 337, Fig. 35.

According to Nordenskiöld, the Panpipes, which consist of several flutes joined together, are rarely found among these Indians (306).

306. Nord. 2, p. 126.

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Plastic art is little developed among the Chiriguano and Chané. On rare occasions we find plastic art in the form of animals in the forms of the baked clay pottery of the Chiriguano (307).

307. Nord. 2, Fig. 41, N. 4, and Fig. 45, N. 20.

Chane SF8
Izozo

/82 cont./

C Ee 531 532 of the Chiriguano vessel I.A. 347 (cf. Fig. 65 /see p. 130/ and 147 /see p. 211/) and the way in which the road under this animal is represented show many reminders of similar representations of the ancient Peruvians. C Ee [171] The representations of animals and people on the surface of vessel I.A. 378 (cf. Figs. 63 /see p. 130 and 146 /see p. 211/), which in external form is quite modern, correspond to those of other South American Indians. Like them the Chiriguano also combine elements of geometrical ornamentation for the representation of zoomorphic or anthropomorphic motifs, for example, the graduated line for the representation of roosters and triangles for the body of women. Cf. Fig. 146 /see p. 211/.

C Ee 531 One principal difference between the decoration painted on the surface of the baked clay vessels and the decoration incised on the surface of cuyas lies in the fact that the painting of the baked clay vessel is limited to the decoration of the upper part of the exterior surface or to that of the upper rim of the interior surface of the vessel, that is, the decoration of a continuum, either wider or narrower, while the incisings on the cuyas decorate the entire exterior surface, more or less semiglobular, often making the center of the semiglobular surface the center of the concentric ornamentation.

Among the decorated cuyas I received from the Chiriguano in Machareti some have only incising and others only pyro-engraving. But most of them combine these two ways of producing a decoration. Several specimens of these decorated cuyas show the same decorative motifs with a surprising similarity. Without counting the stylized phytomorphic motifs, there can also be found among the incised decorations figures like the representation of a small fish (cf. Fig. 148 /see p. 211/) and of a chapel, clearly identified by a cross. Cf. Figure 153 /see p. 212/.

Among incised decorations we must still mention the concentric circumferences made on the surface of most of the Izozó spindle-whorls and various wooden spindle-whorls of the Chiriguano, and the decoration of the "serere" flute shown in

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788 preceding. I must also cite A. Métraux's publication. "Les
792 Hommes-Dieux chez les Chiriguano e dans l'Amérique de Sud
[113] /Men-Gods among the Chiriguano and in South America/" (363).

363. In the Revista del Instituto de Etnologia de la Universidad Nacional de Tucumán. Vol. II. No. 1. Tucumán. 1931.

in which he deals with the cases, repeated several times, in which some individuals among the Chiriguano appear as Messiahs and, acquiring many proselytes, gave the mission administrations much to do.

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[126]

Plaited Objects Used in Religious Celebrations, from the Collection

I.A. 1439. (Chiriguano) Length 70 cm. (Fig. 42b.)
I.A. 1440. " " 37 cm. (Fig. 42a.)

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Plaited objects like those mentioned above are also very common among the Paraguayans and made in the same way. This custom of making such plaited figures and having them blessed, as the Chiriguano also do, is connected with the Catholic ritual, and the Chiriguano no doubt received it from the missionaries along with the other rites of the Catholic religion (364).

364. See the opposite opinion of Métraux I. p. 482.

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[527]

The masks that the Chiriguano make to carry during the Carnival fiestas are also modern objects. Some such Chiriguano masks are shown in drawings by Nordenskiöld and Métraux (365).

365. Nord. 1. Fig. 119. Métraux I. Plate 86 and Fig. 121.

Ci 301 757 781 almost with pride. *Evidently it is thought that the very scars afterwards act as a sort of charm against the spirits.*»[1]

If scars left by wounds are considered to possess desirable, magical properties, it would easily be supposed that perforations that have been kept open must possess the same properties in a greatly enhanced degree. Co 881 301 171 Among the Chiriguano, neighbours of the Chorotí, the actual piercing of the lower lip constituted the most important of the ceremonial acts performed on the boys on their having attained puberty, and among the Chané — whose culture is akin to that of the Chiriguano — not only was the lower lip pierced on this occasion, but the boys were also given *other* wounds on the body.[2]

Ci 301 789 From what I have adduced above, it will therefore be seen that, according to the belief of the Indians, *the making of punctures or perforations on the body, has in itself magic effects, and, consequently, that these magic effects are not believed to arise with the fixing of some ornamental object of magical character — e. g., a tembeta, or an ear disc — into the perforation.*

Ci 301 789 562 This being so, here, in my opinion, lies the explanation of the fact that Chorotí girls sometimes have pierced ear-lobes, although it has never *with certainty* been shown that they ever wear ear discs. On the other hand, from reasons I shall present below, it is *probable* that old Chorotí women, with distended ear-lobes, *exceptionally* do wear ear discs.

I myself, as well as other investigators of the Chaco peoples, have seen elderly women among the Chorotí with holes in their ears so large that one was forced to suppose that the lobes had been stretched in some way or other. Such stretching, however, may not necessarily be due to the wearing of ear blocks, but may have been produced by manual manipulation. That, by such means, perfectly monstrous distension of the soft parts of the body can very well be brought about, is proved by, among other things, the practice of the Hottentot women of lengthening out — merely by frequent pulling — the labia minora into an enormous size.[3] A similar stretching of the hole in the ear-lobe might, from the Indians' point of view, have for its object the increasing, proportionately to its size, the magic properties of the hole. Among the Incas, the size

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[1] Karsten (II), p. 137. Italics by von Rosen.
[2] Karsten (I), p. 200.
[3] von Luschan (I), p. 328.